

LAW INTELLIGENCE.

ROYAL POLBERHOU MINING COMPANY—APPEAL CASE.

STANWICK COURTS, DUCHY OF CORNWALL—MAY 21.
THOMAS S. VICE AND BENDT.—All a few minutes after eight o'clock Prince Albert, the Lord Warden of the Stannaries, habited in a voluminous robe, took his seat, for the purpose of hearing an appeal; in this case, his Royal Highness had the Lord Chancellor and the Master of the Rolls on his right, and Lord Brougham, Vice-Chancellor Wigmore, and Baron Park on his left. The Prince was also attended by the Earl of Lincoln, Lord Portman, Sir H. Wheatley, Mr. Buxton, and Mr. Ascan, members of the Duchy of Cornwall. The title of the case having been read, the SOLICITOR GENERAL, who appeared on behalf of the appellants or defendants, rose to address the court. He had the intent to appear before his Royal Highness and their lordships in this case, which was an appeal against a decree of the Vice-Warden of this court. One of the principal grounds of objection to this decree was, as they (the appellants) alleged, the want in this court of jurisdiction to entertain questions of equity; that it had no power to proceed in any manner contrary to the principles of common law; and that the Crown had no power to create a court of equity in the Duchy of Cornwall. The learned gentleman then went into a short history of the Stannaries Courts, and proceeded to argue at great length, and cite cases in support of his argument, tending to show that there were no provisions in the constitution of those courts empowering them to exercise the jurisdiction of courts of equity.

The LORD CHANCELLOR suggested that there were many courts having such jurisdiction—the Court of the County Palatine of Chester, for instance.

The SOLICITOR GENERAL submitted that such was undoubtedly the case, but there was a difference between the Court of the County Palatine of Chester and the courts in question—which latter, although they possessed many *jura regalia*, did not possess the power of acting as courts of equity. The city of London had its own Court of Chancery, but its powers had been enfeoffed by an Act of Parliament. The distinction between the courts was pointed out in *Cunning's Digest*.

The LORD CHANCELLOR was of opinion that the Stannaries Courts had exercised such jurisdiction in the reign of Charles I.

The SOLICITOR GENERAL—Yes, but it was a modern assumption. The case out of which the present appeal arose was this:—On August 14th, 1826, John Keen, of Cornwall, being lawfully possessed of certain mines or the bounds, called the Polberhou Mine, granted full and free liberty, license, power, and authority to the present plaintiff to dig, work, and search for tin ore for twenty-one years, and that in 1834 William Vice and others forcibly and fraudulently took, kept, and still keep possession of the same, digging, working, searching for, and carrying away, the ore of divers values, to the manifest injury of the petitioner, and contrary to the law of the Stannaries. The petitioner thereupon called upon them to deliver up an account of the tin and the ore so dug and taken away; but the defendants had hitherto refused, and still did refuse, to deliver up the said account, the tin, the ore, or any part of them. Now this petition involved a question of title to property, for it called upon the court to turn out the parties now working the mine and give possession to the petitioner. If the plaintiff were legally right, he could recover possession by common law, by means of an action of ejectment, or by an action of recovery; and while this was the case, was it equitable, just, or right that this petition should be allowed? If the decree of the court was right, the Vice-Warden would be called upon to adjudge the question of title to lands and most valuable property in the county of Cornwall. Now, was there any jurisdiction in a court of equity to deliver up possession of property to which there was a legal title? He (the Solicitor-General) apprehended there was not. Such a practice was contrary to the invariable rule of law in such cases.—Mr. SHAW followed on the same side.

Messrs. BALD and BAXTER, on the other side, argued that tin was not governed by the laws of the land, and that the Warden's Court had full jurisdiction.

It was observed that the defendants objected to the plaintiff's claim, because he had not worked the mine from 1827 to 1834, and, therefore, that defendant had a right to enter and work; but the Act provided,

that, if a holder neglects, he must have regular notice, and regulate the mode by which he must be ousted and proclaimed. It was denied that any process of law would have relieved the plaintiff. The jurisdiction of the Warden's Court was complete; the Act was decisive on that point. The Stannary Court, from time immemorial, took cognizance of all such questions, and, indeed, all questions of difference between miners. The court was not moulded upon the plan of the courts at Westminster, but upon the exigencies of society. The object of the court was to prevent litigation. The Charter of King John distinctly laid down that the Warden and his bailiff shall judge between the miners, and do them right. The Charter of Edward I. exempts miners from answering in courts of law, except in plies of life, limb, and land, and the plaintiff had no right to the land, but only to the tin thereon, and did not set up any claim to the land. But the power of the Court of Stannary had been recognized in all cases. Application was made, goes to Edward the Black Prince, by a minister of the church, alleging that by working the mines the church lands were damaged. But the complaint was at once referred to the Stannary Court. Another case was cited, which had been also referred in the same way. Any action that the plaintiff could have brought might have been answered by a plea that it was in the jurisdiction of the Stannary Court, and then the plaintiff must have failed. The Prince was evidently prosecuted against all courts of law, and it was equally clear he would have the same plea to urge against a court of equity. It had been objected that the plaintiff had proceeded by bill, but, from time immemorial, that had been the mode of proceeding, even for the recovery of a debt for goods sold and delivered for the sum of money, and judgment was invariably given. The learned gentleman then went into the case, and argued for the justice of the Vice-Warden's decree, which was justified in every way by precedents—by the merits of the case itself—by the charter which created the courts for the express purpose of settling differences between miners—and by the fact that the petitioner was shut out from any other mode of procedure.—The SOLICITOR GENERAL replied, urging the inconsistency of the proposition that the powers of the Stannary Courts should supersede that of the Chancery Court, and be at variance with the constitution and practice of the courts of law.—The COURT took time to consider the judgment, which it is expected will be given next week at the Palace.

Prince Albert then took his departure, shortly after two o'clock, his Royal Highness having sat in his court for more than six hours.

LORD ALVANEY'S MINERAL ESTATES.

VICE-CHANCELLOR'S COURT—MAY 22.

ALVANEY v. KIRKLAND.—In the year 1821 Lord Alvaneys conveyed parts of estates to trustees, upon trust to satisfy the claims of his lordship's creditors; he subsequently commenced the present suit for the purpose of obtaining from the trustees, who are the defendants, an account of their dealings with the property. The usual decree was obtained four years ago, and was protracted until the month of May, 1840, when the bankrupt trustee, one of the creditors, who had been made a defendant in the suit on behalf of himself and the other creditors, arrested the further progress of the suit on the ground of an alleged defalcation in the sum of £1000 to the consequence of that event. Mr. Strong, another creditor of Lord Alvaneys, then applied to the Master for leave to conduct the cause in lieu of Lord Alvaneys, and this request was complied with.—At the conclusion of the arguments of counsel in support of the motion to discharge the Master's order, the further hearing of the case was postponed.

The arguments were concluded on Wednesday morning, when his Honour paid to wished to read intently the affidavits which had been brought before him, and he should, therefore, postpone his judgment.

QUESTION OF SEIGNIORY OR MANORIAL DUES.

BAXTER v. THE DUKES OF BRUNSWICK.—Mr. E. J. LACE served as half of the plaintiff for the production of papers in the custody of the defendant or his agents. The plaintiff was the master of two collieries at Gloucestershire, one of which was called the Lansdowne Colliery, the other the Old Church Pit Colliery. It was alleged by the duke that both were situated within the manor of Kilnsey, of which his grace was the lord. The plaintiff transported the coal he worked in the banks of the river, which fell into the sea of Bussone. The duke claimed to be entitled to a payment of £10 per ton (as it was termed, consisting of a certain number of bushels) for all coal raised upon the manor, and carried through it to the river, and exported thence to Bussone. The plaintiff having resisted this claim, an action had been commenced to try the right, to which the general issue was pleaded. A bill of discovery had been filed by the defendant at law for the production of the documents named, in aid of his defense. The date intended to be made in answer to the action was, that there had been such a variance in the payments, and the amount of bushels to each weight, as to negative any customary payment, and that there had been a variance in the manor in which such customary payment were laid. It was also stated, that in a bill filed by Lord Viscount and Granville Somersett, an executors of the late Duke of Gloucester, for the recovery of certain alleged arrears due from Mr. Smith, they had made their claim of the payment in question, as payable only for the weight of coal raised or paid for under the manor, but also for the wages and pence to lay it down for delivery at the river, then making as important a collateral part of the consideration or subject matter, to respect of which the dues were payable. Amongst other documents, proclamations of which was sought, was a copy of the manor and subsidiary, made by virtue of a commission from Queen Elizabeth, which, it was said, by the defendant was equity, but not law issued to him as prolocutor, but an act of the manor.

Mr. LOWMEYER and Mr. COWARDSON, on behalf of the defendant, refuted the witness. The witness denied that there had been any such variance in the measure of payment as was suggested, except to minimize, when it was abundantly discredited and contradicted, by the party liable being called upon

to pay the difference. It was argued that what had been stated by the ex-commissioner neither suit was not to be held as binding upon this defendant. The present motion was merely an attempt at experiment, made with the hope of detecting some infirmity in the title of the plaintiff's manor. The bill, on the face of it, showed a want of reality.—Mr. LACE was heard in reply.

Mr. HOWARD asked for the bill and answer, and took time to consider of the application.

ALLEGED INFRINGEMENT OF RIGHT OF "BRAND."

COURT OF COMMON PLEAS—MAY 25.

CRANDFORD, THOMSON.—This action, it will be remembered, was tried some time since at the London sittings, and was brought by the plaintiff against the defendant (both parties being great ironmasters), to recover damages for having fraudulently and unlawfully imitated the mark they put upon their iron for the Constantinople market, by which the sale of the iron had been injured.—The jury, after a very lengthened trial, found a verdict for the defendant.—A relief was subsequently obtained in the verdict, aside on the ground of misdirection and of its being against evidence; and also in respect of the inadequacy of the notice to the defendants to disseminate the use of the particular mark.—The COURT, after hearing the judge's notes of the evidence, thought there was no ground to disturb the verdict, as being against evidence.

Sir Thomas Wilde, Mr. Sergeant Bompas, and Mr. Sergeant Chanter now showed cause against the rule on the other points, and occupied the situation of the court until nearly four o'clock, when the further hearing of the case was adjourned until Thursday next.

On Thursday the same case again for argument, when Mr. Sergeant SAXE, having addressed the court at great length in support of the rule, the COURT thought that the fact of notice having been given by the plaintiff, that the defendants were imitating his mark, did not affect the merits of the question between the parties, because the action was brought for an imitation fraudulent in point of fact. The case had been properly left to the jury, and the rule must, therefore, be discharged.

LIABILITY OF SHAREHOLDERS—PAYMENT OF CALLS.

COURT OF COMMON PLEAS—MAY 26.

THE AYLESBURY RAILWAY COMPANY v. MOUNT.—Lord Chief Justice TINDAL delivered judgment in this case, which was argued in last Michaelmas term, and which the court had taken time to consider. The action was brought in right for calls of £1 per share upon fifty shares in the undertaking for which the company was incorporated, and the defendant's answer to the action was, that two days before the calls made by the directors were payable, he had duly transferred his shares to one Charles Thompson. It was stated that the company brought an action in the first instance against Thompson, the transferee of the shares, but the Court of Queen's Bench decided, in Hilary Term, 1841, that the action against him was not maintainable. The seller, therefore, the present defendant, was sued for the amount of the calls in this court, and the main question discussed upon demurrer to the defendant's plea was, whether the proprietor of the shares at the time the call was payable, or the owner of them at the time the call was made, was liable for the amount. On the part of the defendant it was contended that the liability fell upon the proprietor for the time being when the calls were payable, while it was urged on behalf of the railway company that the proprietor of the shares at the time the call was made was the party whom they were entitled to demand payment.

The COURT now expressed their opinion, looking at the different sections of the Act of Parliament, that the plea was a good answer to the action; but in saying this, they did not mean to intimate any disapprobation of the decision in the Court of Queen's Bench. Their judgment, therefore, must be for the defendant.

ALD. T. WOOD'S TALACRE IRON AND COAL COMPANY.

SCOTT v. CHAPFELLO.—This was an action upon two bills of exchange, one of which the defendant, by his fourth plea, pleaded in substance that, before he accepted the bills upon which the action was brought, a certain joint-stock mining company, assuming to act, and acting as a corporate body, and agreeing to transfer their shares without any restriction, without having first obtained an Act of Parliament, or royal charter, or letters patent for that purpose, accepted certain bills of exchange in consideration of having purchased the interest of two of the principal shareholders, who drew the bills, and endorsed them, after they had been accepted by the company, to the plaintiff. The plea then stated an agreement to renew the bills, and averred that the defendant, being a member and shareholder of the company, accepted the bills upon which the present action was brought in lieu of the former bills, and for no other consideration whatever. The plaintiff replied in the general form, *de injuria*, and to this replication the defendant demurred.

Mr. Sergeant GASKELL, in support of the defendant, contended that the plea was a denial of the premise alleged in the declaration, and did not raise any matter of excuse. The general replication was, therefore, had.

Mr. Sergeant CHAPFELLO, on the other side, maintained that the plea did admit that a contract had been made in point of fact, and then set out the circumstances, which showed that the defendant had received no consideration. The plea, therefore, contained matter of excuse; but, if their lordships had any doubt on this subject, he was prepared to contend that the plea itself was bad.

The COURT, however, after hearing Mr. Sergeant Gaskell in reply, said that they thought the replication sufficient, for the plea appeared to them to amount in substance to an excuse by the defendant for the non-payment of the bills on which the action was brought. The plea admitted that the plaintiff was the holder of bills which the defendant had accepted, and which he did not pay when they arrived at maturity, and it then said, in effect, "I did not pay, because I am excused from paying under the circumstances." The plaintiff must have judgment.

PREVENTION OF ACCIDENTS ON RAILROADS.

The sitting of the Paris Academy of Sciences on Monday, the 16th inst., was almost exclusively occupied with a discussion on the means of preventing, by the adoption of precautionary measures, the recurrence of accidents on railroads.—M. Deloasset opened the discussion by reading a letter from one of the directors of the London and Birmingham Railway, in which the writer explained his reasons at some length for preferring four-wheeled locomotives to those of six wheels, stating that the increased weight of the six-wheeled locomotive (one-third) rendered them more likely to cause accidents by the breaking of the axles, in which case, the four remaining wheels would not, as was generally supposed, retain the locomotive on the rails. The writer concluded, by wishing that the use of locomotives joined together could be prohibited, but it had been found impossible, owing to the wants of the service requiring more wagons than could be drawn by a single locomotive.—M. Perdonnet, formerly an engineer of the Versailles and Meudon Railway, stated that four-wheeled locomotives were less subject to get off the road in curves, and it was generally acknowledged that the breaking of the axles was more frequent in six-wheeled locomotives than those with four. After some very excellent remarks, he stated that four-wheeled locomotives were not more dangerous than those with six wheels, and that when locomotives with six and four wheels were used together, those with four wheels should invariably be placed in front, and that large trains do not expose passengers to greater danger than small ones multiplied, but their speed ought to be moderated; he then noticed three points which had already been discussed by the Academy—1st, the use of a sort of hook or drag to impede the motion, and, in case of accident, unhook the train; 2d, the propriety of reducing the weight of the carriages incombustible; and, 3d, the addition of wagons without passengers, and fitted with inert matter, before and behind the train. The first two points are but slightly glanced at. On the third M. Perdonnet said—"Such a measure would be very useless for railway proprietors who have to convey merchandise, and where the railway demonstrations exceed certain limits. In such case the practice would augment beyond measure the dead weight."¹ The objection of M. Perdonnet is founded on the expense to railroad companies of carrying a dead weight; but it strikes us also that a dead weight would increase the momentum of a train on a descent, and would, therefore, be dangerous to passengers with an otherwise heavy train. Such danger can only be avoided by having short trains.—The business terminated with the reading of a letter by M. Arago, from Mr. Mauky, the English engineer, summarizing many of the facts and inferences alluded to above.

CASE-LEWIS v. WALTERS-LEWIS AND BAXTER.—(From a correspondence.)—At the annual meeting of the St. Helens and Liverpool Railway Company, the directors expressed their conviction of the necessity of abolishing the use of cast-iron for rails in future, and substituting wrought-iron for that purpose, as also for the spokes of the wheels; the reason of that determination was explained by the management that no less than 200 wheels had been broken during the last year from the use of cast-iron on their line, while on the Roman Railway, where wrought-iron only was employed, but those wheels were injured. This alteration, with some others, had resulted from the imperfect construction of the railway [one of the earliest formed in France]. The directors found but a portion of the difficulties with which they would have, for some time, to contend.

DISCUSSION OF GALVANISM.—The following particulars of this new method of clearing rocks has been furnished to the *Derbyshire Chronicle* by Mr. W. H. Hale, the professor of medical galvanism; and, through containing nothing materially different from what has already appeared in our columns, is worth perusal, as a correct description of a process that is making rapid progress in the estimation of mine proprietors, who certainly desire, by the adoption of Mr. Hobart's ingenious plan, a due to prevent, as much as possible, the sacrifice of human life.—"The rock is bored in the most intricate part of the navigation. Having ascertained from borings that for a depth of twenty-six feet below low-water mark there was nothing but sand, it was decided to use Mitchell's screw monring as foundations for the piles or standards upon which a wooden building should be raised, accordingly, by means of a raft moored over the spot, a series of eight screw monring, each of four feet diameter, were forced in an octagonal form twenty-one feet deep into the sand; another screw was then fixed in the centre, and upon these nine foundations the pillars were raised, the wooden building and the lantern were then fixed, and by means of braces between the supporting piles the requisite stability was given to the edifice; from the animated discussion that ensued, it was gathered that in the heavy gales of wind which it had supported, that little vibration was felt—not more than in the Eddystone and other lighthouses built of stone, but that when the seas struck the projecting gallery on one side, and the suspended ladder, a certain amount of tremor was felt. A comparison was made between this building and one of somewhat similar construction at Fleetwood Harbour, whence it appeared that although the latter building had a greater number of diagonal braces it was deficient in the continuous horizontal tie between the piles, and the system of trussing between the external piles and the centre pillar, to which the stability of the Maplin Sand Lighthouse was mainly attributed. The signs of decay or the decomposition of cast-iron in salt water was also alluded to, but no new facts were elicited.

Mr. C. W. Williams exhibited and explained one of the tubes used by his engineer for the fire-place and three of marine steam-boilers whilst at work; they have enabled him to ascertain many curious facts relative to the combustion of the gas, and to obtain a great diminution of the consumption of coal in the boilers of the Liverpool steamers, with which he is so intimately connected.

BLASTING BY GALVANISM.—The following particulars of this new method of clearing rocks has been furnished to the *Derbyshire Chronicle* by Mr. W. H. Hale, the professor of medical galvanism; and, through containing nothing materially different from what has already appeared in our columns, is worth perusal, as a correct description of a process that is making rapid progress in the estimation of mine proprietors, who certainly desire, by the adoption of Mr. Hobart's ingenious plan, a due to prevent, as much as possible, the sacrifice of human life.—"The rock is bored in the most intricate part of the poles of a very powerful galvanic battery and then coated by means of a very fine wire, which is placed on the galvanometer, having a few grains on the top of it; these wires touch, perhaps, as far as forty or fifty yards, where the battery is placed; one of them is then applied to the zinc cylinder, but no explosion as yet takes place; a spark, however, at the other end immediately gets red-hot, sets fire to the gunpowder in contact with it, and the explosion takes place in consequence. It will be perceived that the galvanic battery merely acts as a conductor for the touch-paper of the old process, and the great advantage derivable from the galvanic method is, that the workmen can be out of danger before there is the least chance of the explosion taking place, which is not the case with the old method. Now, although a battery used for this purpose must be of large dimensions, and the calorific power immense, yet if the two poles were coated by the hands of the human body, as they were by the fire wire, not the least effect would be perceived, and if the two poles were applied to the tongue, scarcely any shock would be felt even in that sensitive part."

DISCUSSION OF CHAMOIS AND BOULANGER'S STEAM NAVIGATION COMPANY.—At the half-yearly meeting of this company, held yesterday, the result presented, which was of a highly satisfactory nature, was unanimously adopted, and a dividend of 3½ per cent. declared. The affairs of the company were stated to be in a gradually improving condition, the receipts of the past six months having exceeded those of the preceding half-year by 20 per cent.

CONSUMPTION OF SMOKE—CHANTER'S PATENT FURNACE AND BOILER.

The subject of consumption of smoke—therby avoiding a nuisance, and at the same time economizing fuel—has long been treated upon in our columns, and elicited many valuable communications, amongst others from Mr. C. W. Williams and Mr. C. Hood. We have this week had submitted to us the reports of several parties, expressive of the opinions they entertain—based on practical observation and experience—of the last patent taken out by Mr. Chantre to effect the desired object, and to which we here refer, considering that a question so important, whether as affects the economy of fuel or rendering a nuisance, cannot be too freely discussed, nor publicity be too extensively afforded. We find it impracticable to describe the patented furnace and boiler by which this object is achieved, without a diagram, which we purpose giving on a future occasion, with more minute details than we are now prepared to do, and shall, therefore, confine our notice to the principal points to which our attention has been directed.

We are informed that the *Axon* and *Seservataan*-boats, built by Messrs. Avaman, Morgan, and Co., of Bristol, for the West India Mail Packet Company, each of 1500 tons, have been supplied with the patented furnace and boiler—the patent to which we refer combining the joint-application of certain principles, or powers, acquired by former patents secured by Mr. Chantre. It is stated that, with respect to steam navigation, full one-half of the smoke is got rid of, and the carbon perfectly consumed, and by the peculiar construction of the boiler safety is secured, there being a large quantity of water over the fire-cover, and the clearing the furnace-bars and removing the ashes, or clinkers, is effected without in any way interfering with the machinery, and thereby avoiding the dust, which is at times highly injurious, the stoker also not being subjected to the intense heat as under the circumstances attendant the use of an ordinary boiler and furnace; the latter may not appear to be of serious moment, but to those acquainted with the engine-room of a steam-boat these advantages will be duly appreciated—at the same time being a great saving of labour.

Having noticed the application of the patent to steam navigation, we may note one or two cases which have been brought under our immediate notice, as relates to stationary-engines, or furnaces, and boilers used in soap factories and other establishments of a like nature; one of these is employed at the Saw-mills, Belvedere-road, Lambeth—another at the soap factory of Dr. L. M. de Normandy, Whitechapel—also at the establishments of Messrs. Barlow and Anderson, Great Suffolk-street—Gibbs, Milton-street, &c. From the testimonial submitted, it is clear that, in some instances, a greater regularity of steam is obtained, with increase of power, the same consumption of coal taking place—in others we find there is a rapidity of combustion and economy of fuel, stated to be equal to 40 to 45 per cent.—the latter being in the case of the application to boilers, as in soap factories, distilleries, dye-houses, &c., while, in all cases, there is a total consumption of carbon and smoke. We hail this improvement with pleasure, for when we consider that, in addition to safety (as compared with the present form of boiler), the saving of fuel, and, further, the consumption of smoke, not to advert to the minor advantages of clearing the furnace-bars and subjecting the stoker to less heat than formerly, it would appear that the principal objects are gained. We are enabled to state on authority, that Mr. Charles Hood, having seen two of the furnaces in operation applied to steam-engines and boilers, has expressed his unqualified opinion that smoke is, by such means, effectively consumed, and that the principle is simple, while no injury is sustained by the boiler, which has been one of the main objections to the several plans heretofore adopted. Dr. Reid has also, we are informed, expressed his satisfaction of the principle, and intends applying it to the new Houses of Parliament.

INSTITUTION OF CIVIL ENGINEERS.

MAY 24.—A set of drawings of the "Machinery for Working the Diving-Bell at Kingstown Harbour," by Mr. Henderson, were exhibited, and a very short description of it was given, from which it appeared that 350 cubic feet

ORIGINAL CORRESPONDENCE.

ON THE EXPLOSION OF STEAM-BOILERS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—In the last Number of your Journal is inserted, under the head "Steam-Boiler Explosions," a notice of a paper read at the Academy of Sciences, from M. Jobard, of Brussels, on some experiments which he purposed to make, with a view of ascertaining the best means of preventing the explosions of steam-boilers. The principal experiment proposed by M. Jobard is, such a construction of the boiler as will permit, when the mixture of explosive gases has been formed, the introduction of a stream of atmospheric air, so as to render them in explosive. Now, Sir, if you will refer to the *Mechanics' Magazine*, No. 975, page 311, you will find the following suggestion for the same purpose by myself; therefore a great coincidence appears between us, but I am most certainly first in the field:—"I believe it is generally understood that the explosions of steam-boilers are occasioned by hydrogen, or some other gas, accumulating and mixing with the steam in the boilers, at least, that some kind of explosive mixture takes place, by which the boilers are burst, the boiler-vanes not acting at times properly, or not opening sufficiently to allow of the escape of the mixed vapours or gases into the open air; if so, would it not be a good plan to blow a steady stream of air heated to the most suitable degree into the boiler, and downwards upon the surface of the water; a valve should, of course, be affixed to the boiler, to discharge the air again from the boiler, that valve being fixed upon a principle of continuous action, perhaps the valve should be kept in action by the engine itself; the hot air would not only purify the boiler of all foul gases, but would accelerate the generation of steam."

THOMAS DEAKIN.

Blaenau, May 24.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—To a 40-foot water-wheel, radius twenty feet, having 4000 lbs. of water to perform one revolution, then 2000 lbs. supplier one-half the circumference, therefore, without any friction, and the power acting with full force, twenty feet from the centre, would raise 2000 lbs. forty feet high—the extreme height of the wheel; but, mathematically applied, the force cannot exceed one-half, taking a proportional average from the centre to the rim, consequently the 2000 lbs. raised must, in the first place, be reduced to 1000 lbs.; & from 1000 lbs. about one-third should be deducted for inertia of wheel and the deficiency of water really acting thereon, which would reduce the actual power as from 3 to 1, or 1233 lbs., limited with 4000.

Observing several letters in your valuable Journal on this subject induced me to send you the above, which I hope will not be considered inconsistent with theoretical reasoning. My only motive is for the best information, and I should like to see the matter carried on with a good feeling, until a decision takes place beneficial to the community.

M. D. THOMAS.

EXAMPLE.—From the revolution, amounting to 4000, deduct one-half, reducing it to 2000; average from centre to rim 1000, deducting for inertia, &c., one-third, leaves 666 for one-half revolution, or 1333 for the whole 4000.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—John Ball said on the 2d of April, page 168, 3d column, and 34th line, that "one fact is worth a thousand assertions." If we go by this rule W. Wheeler has given us six facts, which must be worth 6000 of "A Miner's" assertions.

H. PENNETHURST.

Tunbridge, May 25.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Your correspondent may be a good miner, but his mechanical powers are most assuredly mediocre. His views of hydrostatic calculations, as appeared in your columns of No. 352, prove him to be a mere novice in the matter. Another correspondent on water-power says "I am no wizard;" but if your Bickleigh miner can whirl (or whiz) about the wheel to perform 66 per cent. he has an undoubted right to the title, and it would be far more becoming his profession by his signing his future correspondence as "A Wizard" than by that of "A Miner." Anonymous attacks made on an individual are very annoying, but public writers must be satisfied to submit to the lashes of their opponents. In conclusion, I beg still to hold for my calculations as being far more correct than "A Miner's," and I trust some other scientific gentlemen will come forward to inform what your Dublin correspondent, "O. H.," said last week, that 35 per cent. cannot be gained with a water-wheel—and how the wizard is to gain 66 no one knows but himself.

W. WHEELER.

Fale of Clwyd, May 25.

THE TINCROFT MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Having seen by your Journal of the 21st instant, that the Tincroft Mining Company have made a call of 10s. per share it quite surprised me, for having been in the habit of reading in your paper the "Mining Correspondence," and from that, I should say, the company should rather have made several dividends of 10s. per share, or the mining report is the fallacious that ever was reported. Your inserting this in your next will oblige.

A CONSTANT READER.

STRENGTH OF IRON WIRE AT A LOW TEMPERATURE.

The following experiments were made with iron wire 1-16th inch in diameter, subjected to direct strain:—

	At 0° Fahr.	At 20°
1st experiment breaks with 225 lbs.	224 lbs.	
2d ditto	220	220
3d ditto	212	220
4th ditto	209	220
5th ditto	210	220
6th ditto	206	220
7th ditto	210	220
8th ditto	210	220
9th ditto	214	220
10th ditto	215	220
11th ditto	216	220
12th ditto	216	220

Mons., 214 Mass., 214

—J. M. PATERSON: *Journal of the Franklin Institute.*

DISCOVERY OF COAL IN THE ISLAND OF ST. CLARA.—We find, from your recent correspondence between Capt. Parrot, of the Chilean steamer, and M. Rossette, the governor of Guayaquil, an opinion expressed (based on the report of scientific geologists) that coal of an excellent quality can be procured in that island, and that steps are about being taken to work it.

DUDLEY AND MIDLAND GEOLOGICAL SOCIETY.—A meeting of this society will be held at Dudley, on Tuesday, the 7th June, when the members will lay before the audience a report on the igneous rocks and volcanic conglomerates of the South Staffordshire coal-field. The subject is a highly important one both to the geologist and the miner; and, as we understand that the report will be illustrated by specimens showing the alterations which these rocks have undergone on the different coal measures with which they come in contact, as well as by numerous plans and sections, we anticipate an interesting meeting. Should the weather prove favourable, an excursion will afterwards take place to the Rowley Hills; and we would recommend all who feel an interest in the success of this useful institution, and who have not yet paid a visit to the fine collection of fossils which its members contain, to embrace this opportunity of doing so.—*Midland Courier Herald.*

METALLURGICAL NOTES.—Mr. Bradford, in his *American Antiquities and Researches into the Origin and History of the Red Rose*, in treating on the roses of metallurgy, says:—"Many metallic rosaces have also been discovered among the ancient ruins, some quite perfect, and others in a state of decomposition. Copper appears to have been in the most general use. It has been found in the metals, either in large granular masses or worked into various forms, and sometimes alloyed with silver. Arsenic, arsenite, arsenical plates or medals, bowls, a censer, and pipe-bowls, all composed of this metal, have been discovered from the tombs. One of the ancient mounds of Marietta, Ohio, was situated on the margin of a stream, which had probably washed away the surrounding soil, and part of the structure itself, when a silver cup was observed in the side of the mound. Its form was extremely simple, and resembled some of the earth-worm patterns, being an inverted cone. It consisted of solid silver, the surfaces were smooth and regular, and its interior was finely gilded."

THE MINERS' RELIEF FUND IN BELGIUM.*

(Abstract of Report of the Minister of Public Works, dated 10th Dec., 1853.)

The report commences with a detailed historical view of the earlier regulations in force in Belgium relative to the relief of the miners and their families, in case of accident or sickness; as there is nothing particularly instructive in this, I shall proceed at once to what led to the existing arrangements.

Marked accidents, which took place principally in the department of the Ourthe, in 1812, fixed the attention of Government and the public. It is to these accidents that is due the manifestation of the public solicitude. On the 10th January, 1812, sixty-eight miners perished in the colliery of Horion, victims of an explosion; on the 25th February following twenty-two workmen were buried under water in the mine of Beaufort. Hubert Goffe, an overman, decorated, on this occasion, with the order of Legion of Honour, saved them, by his courage and presence of mind, severely wounded, who had remained buried underground five days and five nights. These accidents called forth the Imperial decree of 3d January, 1813, concerning the subversive policy of mines. A decree of the Emperor, of the 26th May, 1813, founded in France, or rather at Liège, the first relief fund.

I shall not examine here, in detail, the dispositions of this decree. Some wrecks were stopped from the wages of the workmen, but this was not obligatory, and it took place with difficulty; but all the empire, struck with the greatness of mind and the heroism of Goffe, who was the last man to leave the mine, contributed, by donations, to the relief of the wants of the victims of that catastrophe. After abundant distributions, Baron Micoud applied what remained of the funds to the purchase of an annuity of 2227/- on the Great Book of France. This annuity still exists. A decree of your Majesty, of 20th September, 1839, has united it to the new relief fund formed at Liège. At the entry of the allied armies the steps ceased; the relief fund no longer existed—the Netherlands Government did not consent to its re-establishment. So early as the 24th December, 1813, the Governor of the province had addressed, to that effect, the Minister of the Waterstaat; the deputies of the States renewed the application on the 9th January, 1819—the Government refused it by its decree of 10th May, 1821. Later, a fresh application by the province did not even obtain an answer.

New lessons, and the result of more experience were required. At the time of the accidents in the mines of Cierck and Esperance, in March, 1828, and August, 1829, the Netherlands Government limited itself to make donations of 3000 and 3200 francs; public charity and contributions of the owners consumed to alleviate great suffering. Seventy-two workmen perished in these two accidents; eleven others had been wounded. The parsimony was not, yet, so far enough. On the 3d August, 1831, thirty-six workmen perished—victims of an explosion—at the colliery of Grand-Veine-du-Hainaut-d'Épinoy; on the 26th June, 1833, twelve workmen perished, by the same cause, at the mine of Petit-Poët; on the 8th August following thirty-eight workmen perished by an inundation at the colliery of Monceau-Fontaine; on the 31st of the same month an eruption of water destroyed thirteen workmen at the colliery of Sart; an accident occasioned, on the 16th April, 1834, the death of nine workmen at the mine of Poirier; on the 18th April, 1835, fifteen workmen lost their lives in consequence of an explosion at the colliery of Triel-Kaisin; on the 9th December following fifteen workmen perished, by the same cause, at the colliery of Kessain—five others were severely wounded; on the 16th May, 1836, an inundation destroyed twenty-nine workmen in the colliery of St. Victoria; on the 14th June following twenty-two workmen perished, by the explosion of carbonated hydrogen, in the colliery of Grand-Buisson; sixty workmen perished, suffocated, or burned, on the 22d June, 1839, at the colliery of Esperance, at Sersing; on the 1st April, 1840, fire damp occasioned the death of fifty-five workmen at the mine of Horion. But how many victims perished isolated, without attracting public compassion towards their relief of their families? In some of the disasters which I have noticed, Royal munificence, the budget of the state, or individual subscriptions, came in aid of the relations of the victims; but the greater part of them received no relief.

I hope, Sir, to be able soon to submit to you unpublished documents on the cause and nature of the accidents which have occurred within the last twenty years in the mines of Belgium. I shall now give you a summary of these last twenty years, from 1821 to 1840 inclusive:—

Accidents.	Killed.	Wounded.	Total.
Province of Hainaut	495	479	974
District of Namur	50	42	92
District of Luxembourg	579	778	1357
Total in Belgium	1042	1710	2752

The explosions, caused by the inflammable and the degeneration of carbonated hydrogen gas, are the accidents which, if not the most numerous, are the most destructive. The following is a separate summary of these:—

Accidents.	Killed.	Wounded.	Total.
Province of Hainaut	44	144	188
District of Namur	2	1	3
District of Luxembourg	58	298	356
Total in Belgium	104	453	557

Thus, during these twenty years, 1352 serious accidents have occurred; 2752 victims have perished, or have been severely wounded or maimed—thus making a yearly average of 139 victims on a population which may be fixed, approximating during these twenty years, at 28,000; 818 individuals have been victims of explosions; but the 1710 workmen who all perished during that time had wives and children left in misery. In valuing at four the number of the unfortunate whom they abandoned without resources, we shall have a total of 6840 suffering beings.

At last the extent of the calamity at the mine of Esperance created anxiety. The archives of the department of public works contain several propositions which were made on the subject. M. Auguste Viatore, at present director of the administration of mines, published, a few weeks afterwards, an article, which was inserted in the *Revue Belge*, and which the *Revue Universelle* has republished; it is entitled, "On the Establishment of Relief Funds in Belgium in favour of Working Miners." One of my predecessors distributed several hundred copies of this work among the coal owners in different parts of the kingdom. As the delegates of Government, and in virtue of his own official functions, M. Viatore proceeded, successively to Liège, Namur, Mons, Charleroi, and Fléchin-Messine, in order to explain, among the coalowners the advantages of relief funds. The provinces of Liège and Namur (the fund of the province of Namur comprehends the provinces of Luxembourg) acquired relief institutions by decrees of your Majesty, dated 24th June and 1st December, 1839. The regulations relative to relief funds of the districts of Mons and Charleroi have been sanctioned by Royal decree of the 20th and 31st December, 1840. Finally, a decree of your Majesty, of the 30th September last, has approved of the regulations of the fund of the state (Hainaut).

The report, after noticing what laws, regulations, or practice exists relative to the subject in Germany, Great Britain, and France, proceeds to the most important division—namely, the actual state of the relief funds in Belgium. The organization of relief funds in favour of working miners is throughout the same in the 5 subdivisions of our coal basin. The statutes have been approved by your Majesty. The Governors of the provinces (at Charleroi, the commandant of the district), provide over the administrative commissions. The chief engineer of Government, or an engineer delegated by him, constitutes, of right, a part of this commission; the commissioners are composed of coalowners and overseers; they render annually an account of their administration, which is addressed to the Governor of the province and to the Central Administration of Mines. The amount of the pensions is not fixed—it varies according to the wants of the persons who are to be relieved. It has been thought advisable not to specify any particular sum. The widow of workmen who have perished by an accident, their father and mother, if supported by them, receive an annuity for life—no one workman married or become incapable to work is compensated for accidents; the children surviving until they attain a livelihood. Besides these aside, which are called ordinary, the administrative commissions are authorized to distribute extraordinary relief in cases of the victims, who have no right to the pension, in case they stand in need of it—in old workmen become infirm—but not incapable of all work. It is required by the statutes that, on existing and measured with these amounts relief funds, each mine shall have a particular relief fund. The common fund grants pensions in the case of serious accidents, causing death or incapacity of work; the particular fund provides for the wants of workmen wounded or sick, &c. The association thus builds itself to providing for the most serious cases; the action commences when the resources of each limited establishment would be exposed to too strong a blow; it is, in fact, the insufficiency of these resources, in the case of remarkable accidents, which has caused the establishment of, and will maintain, the common associations. The Liège and Namur owners have engaged for a period of five years—those of Hainaut for three years. Every thing augurs that these will consolidate these useful institutions. The resources of these entities are composed of: 1. Of stipends levied on the wages of the workmen. 2. Of contributions of the owners. 3. Of contributions and subsidies of the Government. 4. Of donations and legacies of individuals. For stipends levied on the wages of the workmen, in the common association, is only 1 per cent.; the owners contribute a sum equal to that paid by the workmen. The Legislature, in the budget of 1840 and 1841, has voted subsidies in favour of the miners' Relief Funds. These subsidies have been allotted as follows:—

Province of Hainaut	1840.	1841.
Liège	10,000	10,000
Namur	10,000	10,000
Charleroi	10,000	10,000
Luxembourg	10,000	10,000
Total	40,000	40,000

* The title, in French, is, however, —"fourteen chapters" of the object being not merely to give rules, but to give the miners basis of reference, and to make them practical.

Independently of these resources, the Liège fund has an annuity of 3227/- on the Great Book of France, arising, as I have said before, from the old relief fund established in the department of the Ourthe. A decree of your Majesty, dated 30th September, 1839, has granted the enjoyment of this annuity to the new institution. The provincial council of Hainaut voted, for two years consecutively, a subsidy of 6000/- in favour of the relief fund established in the province. Finally, three establishments, the General Society for Advancing the National Industry, the Society of Capitalists, united for the object of Mutual, and the Society of Commerce of Brussels, have given a donation to the relief fund of Mons of an annual subsidy of at least 3000/- specially for the purpose of the instruction of the children of miners. Besides the aid which the relief funds afford, the administrative commissions can, by virtue of these statutes, apply out of the reserved funds sums for the education of the children of the associated miners. Thus the institution, in providing for the moral wants of rising generations, contributes to ameliorate the future condition of the working miner—the benefit is not limited to the satisfaction of physical wants.

The Belgian coalowners have exhibited humanity and a sound discretion in paying into the fund a quota equal to that which the workmen pay. It is to be observed, that the association exists among the owners, and not directly among the workmen. The subsidies allotted by the Legislature in favour of the association have decided the owners who were irresponsible; rather than expose themselves, in remaining isolated, to all the consequences of accidents, they have found it their interest to form part of the association. At present the greater part of the owners are parties to these institutions. The relief funds of Mons and Charleroi have only existed for a year—that of the Coeur de la Haie was only established on the 1st October, 1841. We may then be proud, Sirs, of the following

LAW INTELLIGENCE.

ROYAL POLBREBOU MINING COMPANY—APPEAL CASE.

STANNARY COURTS, DUCHY OF CORNWALL—MAY 21.
THOMAS v. VICE AND BEADOT.—A few minutes after eight o'clock Prince Albert, the Lord Warden of the Stannaries, habited in a splendid uniform, took his seat, for the purpose of hearing an appeal. In this case, his Royal Highness had the Lord Chancellor and the Master of the Rolls on his right, and Lord Brougham, Vice-Chancellor Wigand, and Baron Park on his left. The Prince was also attended by the Earl of Lonsdale, Lord Portman, Sir H. Wheatley, Mr. Egerton, and Mr. Annes, members of the Duchy of Cornwall. The title of the case having been read, the Solicitor-General, who appeared on behalf of the appellants or defendants, rose to address the court. He had the honour to appear before his Royal Highness and their lordships in this case, which was an appeal against a decree of the Vice-Warden of this court. One of the principal grounds of objection to this decree was, as they (the appellants) alleged, the want in this court of jurisdiction to determine questions of equity; that it had no power to proceed in any manner contrary to the principles of common law; and that the Crown had no power to create a court of equity in the Duchy of Cornwall. The learned gentlemen then went into a short history of the Stannary Courts, and proceeded to argue at great length, and cite cases in support of his argument, tending to show that there were no provisions in the constitution of those courts empowering them to exercise the jurisdiction of courts of equity.

The LORD CHANCELLOR suggested that there were many courts having such jurisdiction—the Court of the County Palatine of Chester, for instance.

The SOLICITOR-GENERAL submitted that such was undoubtedly the case, but there was a difference between the Court of the County Palatine of Chester and the courts in question—which latter, although they possessed many *jura regalia*, did not possess the power of acting as courts of equity. The city of London had its own Court of Chancery, but its powers had been confirmed by an Act of Parliament. The distinction between the courts was pointed out in *Common's Digest*.

The LORD CHANCELLOR was of opinion that the Stannary Courts had exercised such jurisdiction in the reign of Charles I.

The SOLICITOR-GENERAL—Yes, but it was a modern assumption. The case out of which the present appeal arose was this—On August 12th, 1835, John Keen, of Cornwall, being lawfully possessed of a certain mine or tin-works, called the Pulhous Mine, granted full and free liberty, license, power, and authority to the present plaintiff to dig, work, and search for tin-ore for twenty-one years, and that in 1834 William Vice and others forcibly and fraudulently took, kept, and still keep possession of the same, digging, working, searching for, and carrying away, tin-ore of divers values, to the manifest injury of the petitioner, and contrary to the law of the Stannaries. The petitioner thereupon called upon them to deliver up an account of the tin and tin-ore so dug and taken away; but the defendants had hitherto refused, and still do refuse, to deliver up the said account, the tin, the tin-ore, or any part of them. Now this petition involved a question of title to property, for it called upon the court to turn out the parties now working the mine and give possession to the petitioner. If the plaintiff were legally right, he could recover possession by common law, by means of an action of ejectment, or by an action of recovery; and while this was the case, was it equitable, just, or right that this petition should be allowed? If the decree of the court was right, the Vice-Warden would be called upon to adjudge the question of title to lands and most valuable property in the county of Cornwall. Now, was there any jurisdiction in a court of equity to deliver up possession of property to which there was a legal title? He (the Solicitor-General) apprehended there was not. Such a practice was contrary to the inevitable rule of law in such cases.—Mr. BRAMPTON followed on the same side.

Messrs. BROWN and BAXTER, on the other side, argued that it was not governed by the laws of the land, and that the Warden's Court had full jurisdiction.

It was observed that the defendants objected to the plaintiff's claim, because he had not worked the mine from 1827 to 1834, and, therefore, that defendant had a right to enter and work; but the Act provided, that, if a holder neglects, he must have regular notice, and regulate the mode by which he must be ousted and proclaimed. It was denied that any process of law would have relieved the plaintiff. The jurisdiction of the Warden's Court was complete; the Act was decisive on that point.

The Stannary Court, from time immemorial, took cognizance of all such questions, and, indeed, all questions of difference between tinners. The court was not modelled upon the plan of the courts at Westminster, but upon the exigencies of society. The object of the court was to prevent litigation. The Charter of King John distinctly laid down that the Warden and his half-brother shall judge between the tinners, and do them right. The Charter of Edward I. exempted tinners from answering in courts of law, except in cases of life, limb, and land, and the plaintiff had no right to the land, but only to the tin thereon, and did not set up any claim to the land. But the power of the Court of Stannary had been recognized in all cases. Application was made, made to Edward the Black Prince, by a minister of the church, alleging that by working the mines the church lands were damaged. But the complaint was at once referred to the Stannary Court. Another case was cited, which had been also referred in the same way. Any action that the plaintiff could have brought might have been answered by a plea that it was in the jurisdiction of the Stannary Court, and then the plaintiff must have failed. The tinner was evidently prosecuted against all courts of law, and it was equally clear he would have the same plea to urge against a court of equity. It had been objected that the plaintiff had proceeded by bill, but, from time immemorial, that had been the mode of proceeding, even for the recovery of a debt for goods sold and delivered for the use of mines, and judgment was invariably given.

The learned gentlemen then went into the case, and argued for the justice of the Vice-Warden's decree, which was justified in every way by precedents—by the merits of the case itself—by the charters which created the courts for the express purpose of settling differences between tinners—and by the fact that the petitioner was shut out from any other mode of procedure.—The SOLICITOR-GENERAL replied, urging the inconsistency of the suggestion that the power of the Stannary Courts should supersede that of the Chancery Court, and be at variance with the constitution and practice of the courts of law.—The COURT took time to consider its judgment, which it is expected will be given next week at the Palace.

Prince Albert then took his departure, shortly after two o'clock, his Royal Highness having sat in his court for more than six hours.

LORD ALVANLEY'S MINERAL ESTATES.

VICE-CHANCELLOR'S COURT—MAY 20.

ALVANLEY v. KIRKHAM.—In the year 1822 Lord Alvanley conveyed quite a estate to trustees, upon trust to satisfy the claims of his lordship's creditors; he subsequently commenced the present suit for the purpose of abstaining from the trustees, who are the defendants, an account of their dealings with the property. The usual decree was obtained five years ago, and was protracted until the month of May, 1840, when the bankruptcy of one of the creditors, who had been made a defendant to the suit on behalf of himself and the other creditors, arrested the further progress of the suit, on the ground of an alleged defectiveness in the frame of the record in consequence of that event. Mr. Strong, another creditor of Lord Alvanley, then applied to the Master for leave to conduct the cause in lieu of Lord Alvanley, and this request was complied with.—At the conclusion of the arguments in support of the motion to discharge the Master's order, the further hearing of the case was postponed.

The expenses were considered on Wednesday morning, when his Honour, as he wished to end entirely the affidavit which had been brought before him, and so should, therefore, postpone his judgment.

QUESTION OF SEIGNIORY OR MANOR DUES.

BROWN v. DUKE OF BRUNSWICK.—Mr. E. J. LLOYD moved on behalf of the plaintiff for the production of papers in the custody of the defendant or his agents. The plaintiff was the workman of two collieries in Gloucester, one of which was called the Landseer Colliery, the other the Old Church Pit Colliery. It was alleged by the duke that both were situated within the manor of Kilburn, of which his grace was the lord. The plaintiff transported the coal he worked in the banks of the river, which fell into the bay of Gloucester. The date claimed to be entitled to a payment of £1 per ton (as it was termed, consisting of a certain number of bushels) for all coal raised upon the manor, and carried through it in the river, and exported thence by sea. The plaintiff having resisted this claim, an action had been commenced to try the right, to which the general issue was pleaded. A bill of discovery had been filed by the defendant at law for the production of the documents named, to set off his defense. The case intended to be made in answer to the action was, that there had been such a variance in the payments, and the amount of bushels to each weight, as to negative any customary payment, and that there had been a variance in the measure in which such customary payment was made. It was also stated, that in a bill filed by Louis Phipps and Christopher Bonham, as executors of the late Duke of Brunswick, for the recovery of certain alleged arrears due from Mr. Smith, they had made their claim of the present in question, as payable and only for every weight of coal raised or paid for under the manor, but also for the sea wages and pence to lay it down for delivery at the place, thus making an important element part of the consideration or subject matter, in respect of which the dues were payable. Amongst other documents, production of which was sought, was a survey of the manor and seigniory, made by virtue of a commission from Oliver Cromwell, which, it was said, by the defendant is equity, had not been issued to him as prothonotary, but as lord of the manor.

Mr. Lawrence and Mr. Cawson, on behalf of the defendant, resisted the motion. The answer denied that there had been any such variance in the measure of payment as was suggested, except to indicate, where it was summarily dismissed and overruled, by the party whose being raised upon

to pay the difference. It was argued that what had been stated by the evidence in another suit was not to be held as binding upon this defendant. The present motion was merely an attempt or experiment, made with the hope of detecting some infirmity in the title of the plaintiff's land. The bill, on the face of it, showed a want of equity.—Mr. LLOYD's was heard in reply.

ALLEGED INFRINGEMENT OF RIGHT OF "BRAND."

COURT OF COMMON PLACES—MAY 25.

CRAWDAY v. THOMPSON.—This action, it will be remembered, was tried some time since at the London sittings, and was brought by the plaintiff against the defendant (both parties being great ironmasters), to recover damages for having fraudulently and unlawfully imitated the mark put upon their iron for the Constantinople market, by which the sale of the iron had been injured.—The jury, after a very lengthened trial, found a verdict for the defendants.—A relief was subsequently obtained in at the verdict, aside on the ground of misdirection and of its being against evidence; and also in respect of the legal effect of the notice to the defendants to discontinue the use of the particular mark.—The COURT, after hearing the judge's notes of the evidence, thought there was no ground to disturb the verdict as being against evidence.

Sir Thomas Wilde, Mr. Sergeant Bompas, and Mr. Sergeant Chanel now showed cause against the rule on the other points, and occupied the attention of the court until nearly four o'clock, when the further hearing of the case was adjourned until Thursday next.

On Thursday the case came on again for argument, when Mr. Sergeant BAMPAS, having addressed the court at great length in support of the rule, the COURT thought that the fact of notice having been given by the plaintiff, that the defendants were imitating his mark, did not affect the merits of the question between the parties, because the action was brought for an imitation fraudulent in point of fact. The case had been properly left to the jury, and the rule must, therefore, be discharged.

LIABILITY OF SHAREHOLDERS—PAYMENT OF CALLS.

COURT OF COMMON PLACES—MAY 25.

THE ATLESBURY RAILWAY COMPANY v. MOUNT.—Lord Chief Justice TINDAL delivered judgment in this case, which was argued in last Michaelmas term, and which the court had taken time to consider. The action was brought in debt for calls of £1. per share upon fifty shares in the undertaking for which the company was incorporated, and the defendant's answer to the action was, that two days before the calls made by the directors were payable, he had duly transferred his shares in one Charles Thompson. It was stated that the company brought an action in the first instance against Thompson, the transferee of the shares, but the Court of Queen's Bench decided, in Hilary Term, 1841, that the action against him was not maintainable. The seller, therefore, the present defendant, was sued for the amount of the calls in this court, and the main question discussed upon damages to the defendant's plea was, whether the proprietor of the shares at the time the call was payable, or the owner of them at the time the call was made, was liable for the amount. On the part of the defendant it was contended that the liability fell upon the proprietor for the time being when the calls were payable, while it was urged on behalf of the railway company that the proprietor of the shares at the time the call was made was the party from whom they were entitled to demand payment.

The COURT now expressed their opinion, looking at the different sections of the Act of Parliament, that the plea was a good answer to the action; but in saying this, they did not mean to intimate any disapprobation of the decision in the Court of Queen's Bench. Their judgment, therefore, must be for the defendant.

ALD. T. WOOD'S TALACRE IRON AND COAL COMPANY.

SCOTT v. CHAPFELLO.—This was an action upon two bills of exchange, in which the defendant, by his fourth plea, pleaded in substance that, before he accepted the bills upon which the action was brought, a certain joint-stock mining company, assuming to act, and acting as a corporate body, and agreeing to transfer their shares without any restriction, without having first obtained an Act of Parliament, or royal charter, or letters patent for that purpose, accepted certain bills of exchange in consideration of having purchased the interest of two of the principal shareholders, who drew the bills, and endorsed them, after they had been accepted by the company, to the plaintiff. The plea then stated an agreement to renew the bills, and averred that the defendant, being a member and shareholder of the company, accepted the bills upon which the present action was brought in lieu of the former bills, and for no other consideration whatever. The plaintiff replied in the general form, *de injuria*, and to this replication the defendant demurred.

Mr. Sergeant GASCOINE, in support of the defendant, contended that the plea was a denial of the promise alleged in the declaration, and did not contain matter of excuse. The general replication was, therefore, bad.

Mr. Sergeant CHANNEL, on the other side, maintained that the plea did admit that a contract had been made in point of fact, and then set out the circumstances, which showed that the defendant had received no consideration. The plea, therefore, contained matter of excuse; but, if their lordships had any doubt on this subject, he was prepared to contend that the plea itself was bad.

The COURT, however, after hearing Mr. Sergeant Gascoine in reply, said that they thought the replication sufficient, for the plea appeared to them to amount in substance to an excuse by the defendant for the non-payment of the bills on which the action was brought. The plea admitted that the plaintiff was the holder of bills which the defendant had accepted, and which he did not pay when they arrived at maturity, and it then said, in effect, "I did not pay, because I am excused from paying under the circumstances." The plaintiff must have judgment.

PREVENTION OF ACCIDENTS ON RAILROADS.

The sitting of the Paris Academy of Sciences on Monday, the 16th Inst., was almost exclusively occupied with a discussion on the means of preventing, by the adoption of precautionary measures, the recurrence of accidents on railroads.—M. Deloissart opened the discussion, by reading a letter from one of the directors of the London and Birmingham Railway, in which the writer explained his reasons at some length for preferring four-wheeled locomotives to those of six wheels, stating that the increased weight of the six-wheeled locomotive (one-third), rendered them more likely to cause accidents by the breaking of the axles, to which case, the four-wheeled wheels would not, as was generally supposed, retain the locomotive on the rails. The writer concluded, by wishing that the use of locomotives joined together could be prohibited, but it had been found impossible, owing to the wants of the service requiring more wagons than could be drawn by a single locomotive.—M. Peronneau, formerly an engineer of the Yverdon and Meudon Railway, stated that four-wheeled locomotives were less liable to get off the rails in curves, and it was generally acknowledged that the breaking of the axles was more frequent in six-wheeled locomotives than those with four. After some very curious remarks, he stated that four-wheeled locomotives were not more dangerous than those with six wheels, and that when locomotives with six and four wheels were used together, those with four wheels should invariably be placed in front, and that large trains do not expose passengers to greater danger than small ones multiplied, but their speed ought to be moderated; he then noticed those points which had already been discussed by the Academy—1st, the use of a sort of hook or drag to impede the motion, and, in case of accident, unhook the train; 2d, the propriety of rendering the wood of the carriages incombustible; and, 3d, the addition of wagons without passengers, and fitted with inert matter, before and behind the train. The first two points are but slightly glanced at. On the third M. Peronneau said—"Such a measure would be very useless for railway proprietors who have to convey merchandise, and where the railway destinations exceed certain limits. In such case the practice would augment beyond measure the dead weight." The objection of M. Peronneau is founded on the expense of reduced compasses of carrying a dead weight; but it strikes us also that a dead weight would increase the momentum of a train on a descent, and would, therefore, be dangerous to passengers with an otherwise heavy train. Such danger can only be avoided by having short trains.—The business terminated with the reading of a letter by M. Arago, from Mr. Massey, the English engineer, corroborating many of the facts and inferences alluded to above.

CASE-JONES v. WARWICK-LEWIS & BAXTER.—(From a correspondence.)—At the second meeting of the St. Elmo's and Lotus Railway Company, the directors expressed their conviction of the necessity of abolishing the use of cast-iron for rails in future, and substituting wrought-iron for that purpose, as also for the spokes of the wheels; the cause of that determination was explained by the announcement that no less than 263 wheels had been broken during the last year from the use of cast-iron on their line, while on the Roman Railway, where wrought-iron only was employed, but those wheels were injured. This alteration, with some others, sprung originally from the imperfect construction of the railway [one of the earliest formed in France], the directors found was but a portion of the difficulties with which they would have, for some time, to contend.

CONSTITUTION OF SMOKE—CHANTRY'S PATENT FURNACE AND BOILER.

The subject of consumption of smoke—thereby avoiding a nuisance, and at the same time economizing fuel—has been oft treated upon in our columns, and elicited many valuable communications, amongst others from Mr. C. W. Williams and Mr. C. Hood. We have this week had submitted to us the reports of several parties, expressive of the opinions they entertain—based on practical observation and experience—of the last patent taken out by Mr. Chantry to effect the desired object, and to which we here refer, considering that a question so important, whether as affects the economy of fuel or remedying a nuisance, cannot be too freely discussed, nor publicity be too extensively afforded. We find it impracticable to describe the patented furnace and boiler by which this object is achieved, without a diagram, which we purpose giving on a future occasion, with more minute details than we are now prepared to do, and shall, therefore, confine our notice to the principal points to which our attention has been directed.

We are informed that the *Aqua and Somewatson-boats*, built by Messrs. Aeroman, Morgan, and Co., of Bristol, for the West India Mail Packet Company, each of 1500 tons, have been supplied with the patented furnace and boiler—the patent to which we refer combining the joint-application of certain principles, or powers, acquired by former patents secured by Mr. Chantry. It is stated that, with respect to steam navigation, full one-half of the smoke is got rid of, and the carbon perfectly consumed, and by the peculiar construction of the boiler safety is secured, there being a large quantity of water over the fire-cover, and the clearing the furnace-bars and removing the ashes, or clinkers, is effected without in any way interfering with the machinery, and thereby avoiding the dust, which is at times highly injurious, the stoker also not being subjected to the intense heat as under the circumstances attendant the use of an ordinary boiler and furnace; the latter may not appear to be of serious moment, but to those acquainted with the engine-room of a steam-boat these advantages will be duly appreciated—at the same time being a great saving of labour.

Having noticed the application of the patent to steam navigation, we may note one or two cases which have been brought under our immediate notice, as related to stationary-engines, or furnaces, and boilers used in soap factories and other establishments of a like nature; one of these is employed at the Saw-mills, Belvedere-road, Lambeth—another at the soap factory of Dr. L. M. de Normandy, Whitechapel—also at the establishments of Messrs. Barlow and Anderson, Great Suffolk-street—Gibbs, Milton-street, &c. From the testimonials submitted, it is clear that, in some instances, a greater regularity of steam is obtained, with increase of power, the same consumption of coal taking place—in others we find there is a rapidity of combustion and economy of fuel, stated to be equal to 40 to 45 per cent.—the latter being in the case of its application to boilers, as in soap factories, distilleries, dye-houses, &c., while, in all cases, there is a total consumption of carbon and smoke. We hail this improvement with pleasure, for when we consider that, in addition to safety (as compared with the present form of boiler), the saving of fuel, and, further, the consumption of smoke, not to advert to the minor advantages of clearing the furnace-bars and subjecting the stoker to less heat than formerly, it would appear that the principal objects are gained. We are enabled to state on authority, that Mr. Charles Hood, having seen two of the furnaces in operation applied to steam-engines and boilers, has expressed his unqualified opinion that smoke is, by such means, effectively consumed, and that the principle is simple, while no injury is sustained by the boiler, which has been one of the main objections to the several plans heretofore adopted.

Having noticed the application of the patent to steam navigation, we may note one or two cases which have been brought under our immediate notice, as related to stationary-engines, or furnaces, and boilers used in soap factories and other establishments of a like nature; one of these is employed at the Saw-mills, Belvedere-road, Lambeth—another at the soap factory of Dr. L. M. de Normandy, Whitechapel—also at the establishments of Messrs. Barlow and Anderson, Great Suffolk-street—Gibbs, Milton-street, &c. From the testimonials submitted, it is clear that, in some instances, a greater regularity of steam is obtained, with increase of power, the same consumption of coal taking place—in others we find there is a rapidity of combustion and economy of fuel, stated to be equal to 40 to 45 per cent.—the latter being in the case of its application to boilers, as in soap factories, distilleries, dye-houses, &c., while, in all cases, there is a total consumption of carbon and smoke. We hail this improvement with pleasure, for when we consider that, in addition to safety (as compared with the present form of boiler), the saving of fuel, and, further, the consumption of smoke, not to advert to the minor advantages of clearing the furnace-bars and subjecting the stoker to less heat than formerly, it would appear that the principal objects are gained. We are enabled to state on authority, that Mr. Charles Hood, having seen two of the furnaces in operation applied to steam-engines and boilers, has expressed his unqualified opinion that smoke is, by such means, effectively consumed, and that the principle is simple, while no injury is sustained by the boiler, which has been one of the main objections to the several plans heretofore adopted.

INSTITUTION OF CIVIL ENGINEERS.

MAY 24.—A set of drawings of the "Machinery for Working the Diving-Bell at Kingstown Harbour," by Mr. Henderson, were exhibited, and a very short description of it was given, from which it appeared that 350 cubic feet of stones could be laid in a day from the bell, and that the works had proceeded most satisfactorily.

The "Steam Dredging Machine on the Caledonian Canal," described in a paper by Mr. Elliot, was only interesting as being one of the earliest machines of the kind brought into use; it appears to have rendered essential service in the construction of the canal, and, subsequently, in keeping it open. It has been put to rather a novel use, in excavating, not only under water, but in working away the banks, where it did more labour, and more economically, than the excavators with spades and barrows; the paper was illustrated by two good drawings.

"The Description of the Maplin Sand Lighthouse," by Mr. Redman, was accompanied by some nicely executed drawings, and the paper was illustrated by a model lent by the Trinity-house, under whose auspices the lighthouse was erected by Messrs. Walker and Burgess, the engineers to the corporation. The office is situated on a bank of sand at the mouth of the Thames, in the most intricate part of the navigation. Having ascended from borings that for a depth of twenty-seven feet below low-water mark there was nothing but sand, it was decided to use Mitchell's screw moorings as foundations for the piles or standards upon which a wooden building should be raised, according to means of a raft moored over the spot, a series of eight screw moorings, each of four feet diameter, were forced in an octagonal form twenty-one feet deep into the sand; another was then fixed in the centre, and upon these nine foundations the pillars were raised, the wooden building and the lantern were then fixed, and by means of braces between the supporting piles the requisite stability was given to the edifice; from the animated discussion that ensued, it was gathered that in the heavy gales of wind which it had experienced, that little vibration was felt—not more than in the Eddystone and other lighthouses built of stone, but that when the seas struck the projecting gallery on one side, and the suspended ladder, a certain amount of tremor was felt. A comparison was made between this building and one somewhat similar construction at Fleetwood Harbour, whence it appeared that although the latter building had a greater number of diagonal braces, it was deficient in the continuous horizontal ties between the piles, and the system of trussing between the external piles and the centre pillar, to which the stability of the Maplin Sand Lighthouse was mainly to be attributed. The source of the decay or the decomposition of cast-iron in salt water was alluded to, but no new facts were elicited.

Mr. C. W. Williams exhibited and explained one of the tubes used by his engineer into the fire-place and door of marine steam-boilers whilst at work; they have enabled him to ascertain many curious facts relative to the combustion of the gases, and to obtain a great diminution of the consumption of coal in the boilers of the Liverpool steamers, with which he is so intimately connected.

BLASTING BY GALVANISM.—The following particulars of this new method of blasting rocks has been furnished to the *Derbyshire Chronicle* by Mr. W. H. Holmes, the professor of medical galvanism; and, though containing nothing materially different from what has already appeared in our columns, is worth perusal, as a correct description

ORIGINAL CORRESPONDENCE.

ON THE EXPLOSION OF STEAM-BOILERS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—In the last Number of your Journal is inserted, under the head "Steam-Boiler Explosions," a notice of a paper read at the Academy of Sciences, from M. Jobard, of Brussels, on some experiments which he proposes to make, with a view of ascertaining the best means of preventing the explosions of steam-boilers. The principal experiment proposed by M. Jobard is, such a construction of the boiler as will permit, when the mixture of explosive gases has been formed, the introduction of a stream of atmospheric air, so as to render them incombustible. Now, Sir, if you will refer to the *Mechanics' Magazine*, No. 575, page 311, you will find the following suggestion for the same purpose by myself; therefore a great coincidence appears between us, but I am most certainly first in the field—"I believe it is generally understood that the explosions of steam-boilers are occasioned by hydrogen, or some other gas, accumulating and mixing with the steam in the boilers, at least, that some kind of explosive mixture takes place, by which the boilers are burst, the boiler-vessel not acting at times properly, or not opening sufficiently to allow of the escape of the mixed vapours, or gases into the open air; if so, would it not be a good plan to blow a steady stream of air heated to the most suitable degree into the boiler, and downwards upon the surface of the water; a valve should, of course, be affixed to the boiler, to discharge the air again from the boiler, that valve being fixed upon a principle of continued action, perhaps the valve should be kept in action by the engine itself; the hot air would not only purify the boiler of all foul gases, but would accelerate the generation of steam."

THOMAS DEAKIN.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—To a 40-foot water-wheel, radius twenty feet, having 4000 lbs. of water to perform one revolution, then 2000 lbs. supplier one-half the circumference, therefore, without any friction, and the power acting with full force, twenty feet from the centre, would raise 2000 lbs. forty feet high—the extreme height of the wheel; but, mathematically applied, the force cannot exceed one-half, taking a proportional average from the centre to the rim, consequently the 2000 lbs. raised must, in the first place, be reduced to 1000 lbs.; 2d, from 1000 lbs. about one-third should be deducted for inertia of wheel and the deficiency of water really acting thereon, which would reduce the actual power as from 3 to 1, or 1233 lbs. lifted with 4000.

Observing several letters in your valuable Journal on this subject induced me to send you the above, which I hope will not be considered inconsistent with theoretical reasoning. My only motive is for the best information, and I should like to see the matter carried on with a good feeling, until a decision takes place beneficial to the community.

M. D. THOMAS.

EXAMPLE.—From the revolution, amounting to 4000, deduct one-half, reducing it to 2000; average from centre to rim 1000, deducting for inertia, &c., one-third, leaves 666 for one-half revolution, or 1333 for the whole 4000.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—John Bull said on the 2d of April, page 168, 3d column, and 5th line, that "one fact is worth a thousand assertions." If we go by this rule W. Wheeler has given us six facts, which must be worth 6000 of "A Miner's" assertions.

H. PENBERTH.

WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Your correspondent may be a good miner, but his mechanical powers are most assuredly mediocre. His views of hydrostatic calculations, as appeared in your columns of No. 332, prove him to be a mere novice in the matter. Another correspondent on water-power says: "I am no wizard;" but if your Bickleigh miner can whirr (or whiz) about the wheel to perform 66 per cent. he has an undoubted right to the title, and it would be far more becoming his profession by his signing his future correspondence as "A Wizard" than by that of "A Miner." Anonymous attacks made on an individual are very annoying, but public writers must be satisfied to submit to the lashes of their opponents. In conclusion, I beg still to hold for my calculations as being far more correct than "A Miner's," and I trust some other scientific gentlemen will come forward to affirm what your Dublin correspondent, "O. H.," said last week, that 33 per cent. cannot be gained with a water-wheel—and how the wizard is gain 66 no one knows but himself.

W. WHEELER.

THE TINCROFT MINING COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Sir.—Having seen by your Journal of the 21st inst. that the Tincroft Mining Company have made a call of 10s. per share it quite surprised me, for having been in the habit of reading in your paper the "Mining Correspondence," and from that, I should say, the company should rather have made several dividends of 10s. per share, or the mining report is the most fallacious that ever was reported. Your inserting this in your next will oblige.

A CONSTANT READER.

STRENGTH OF IRON WIRE AT A LOW TEMPERATURE.

The following experiments were made with iron wire 1-16th inch in diameter, subjected to direct strain:

	At 0° Fahr.	At -20° Fahr.
1st experiment broke with 212 lbs.	214 lbs.	
2d ditto	210	200
3d ditto	212	200
4th ditto	200	204
5th ditto	210	218
6th ditto	200	206
7th ditto	210	200
8th ditto	210	204
9th ditto	210	208
10th ditto	210	206
11th ditto	210	208
12th ditto	210	202
Mean	214	204

—J. M. BARONSKY: *Journal of the Franklin Institute.*

DISCOVERY OF COAL IN THE ISLAND OF ST. CLARA.—We find, from some recent correspondence between Capt. Peacock, of the Chile steamer, and M. Ronfautre, the governor of Guayaquil, an opinion expressed (based on the report of scientific geologists) that coal of an excellent quality can be presumed in that island, and that steps are about being taken to work it.

DUDLEY AND MIDLAND GEOLOGICAL SOCIETY.—A meeting of this society will be held at Dudley, on Tuesday, the 7th June, when the committee will lay before the members a report on the igneous rock and volcanic conglomerates of the South Staffordshire coal-field. The subject is a highly important one both to the geologist and the miner; and, as we understand, that the report will be illustrated by specimens showing the alteration which these rocks have produced on the different coal measures with which they come in contact, as well as by numerous plans and sections, we anticipate an interesting meeting. Should the weather prove favourable, an excursion will afterwards take place in the Rowley Hills; and we would recommend all who feel an interest in the success of this useful institution, and who have not yet paid a visit to the fine collection of fossils which the museum contains, to embrace this opportunity of doing so.—*Middlesex Evening Herald.*

METALLURGICAL RESEARCH.—Mr. Headland, in his *American Antiquities and Researches into the Origin and History of the Red Stone*, in treating on the rocks of metallurgy, says:—"Many metallic remains have also been discovered, among the ancient ruins, some quite perfect, and others in a state of decomposition. Copper appears to have been in the most general use. It has been found in the masses, either in irregular masses or worked into various forms, and sometimes alloyed with silver. Arsenicals, bismuth, chalcocite, pyrite, and malachite, are common, and pipe-bands, all composed of this metal, have been discovered from the tunnels. One of the ancient mounds of Marietta, Ohio, was situated on the margin of a stream, which had gradually washed away the surrounding soil, and part of the structure itself, when a silver cup was observed in the side of the mound. Its form was extremely simple, and resembled some of the cruciform patterns, being an inverted cone. It consisted of solid silver, its surfaces were smooth and regular, and its interior was finely gilded."

THE MINERS' RELIEF FUND IN BELGIUM.*

[Abstract of Report of the Minister of Public Works, dated 19th Dec., 1841.]

The report commences with a detailed historical view of the earlier regulations in force in Belgium relative to the relief of the miners and their families, in case of accident or sickness; as there is nothing particularly instructive in this, I shall proceed at once to what led to the existing arrangements.

Marked accidents, which took place principally in the department of the Ourthe, in 1812, fixed the attention of Government and the public. It is to these accidents that is due the manifestation of the public solicitude. On the 10th January, 1812, sixty-eight miners perished in the colliery of Horion, victims of an explosion; on the 25th February following twenty-two workers were buried under water in the mine of Beaufort. Hubert Goffe, an overseer, decorated, on this occasion, with the order of the Legion of Honour, saved there, by his courage and presence of mind, seventy workmen, who had remained buried underground five days and five nights. These accidents called forth the Imperial decree of 3d January, 1813, concerning the subterranean police of mines. A decree of the Emperor, of the 26th May, 1812, founded in France, or rather at Liège, the first relief fund.

I shall not examine here, in detail, the dispositions of this decree. Some were to be stopped from the wages of the workmen, but this was not obligatory, and took place with difficulty; but all the empire, struck with the greatness of mind and the heroism of Goffe, who was the last man to leave the mine, contributed, by donations, to the relief of the wants of the victims of that catastrophe. After abundant distributions, Baron Micoud applied what remained of the funds to the purchase of an annuity of 22,277. on the Great Book of France. This annuity still exists. A decree of your Majesty, of 30th September, 1839, has suited it to the new relief fund formed at Liège. At the entry of the allied armies the stops ceased; the relief fund no longer existed—the Netherlands Government did not consent to its re-establishment. So early as the 24th December, 1812, the Governor of the province had addressed, to that effect, the Minister of the Waterstaat; the department of the States renewed the application on the 8th January, 1819—the Government refused it by its decision of 16th May, 1821. Later, a fresh application by the province did not even obtain an answer.

Now lessons, and the result of more experience were required. At the time of the accidents in the mines of Cuckfield and Esperance, in March, 1828, and August, 1829, the Netherlands Government limited itself to make donations of 3000 and 3200 francs; public charity and contributions of the owners conduced to alleviate great sufferings. Seventy-two workmen had perished in these two accidents; eleven others had been wounded. The passing was not, as yet, solemn enough. On the 2d August, 1831, twelve workmen perished—victims of an explosion—at the colliery of Grand-Veine-du-Bousdin-d'Epinoy; on the 26th June, 1835, twelve workmen perished, by the same cause, at the mine of Petit-Fort; on the 8th August following thirty-eight workmen perished by an inundation at the colliery of Monceau-Fontaine; on the 31st of the same month an eruption of water destroyed thirteen workmen at the colliery of Sart; an accident occurred, on the 16th April, 1834, the death of nine workmen at the mine of Poirier; on the 18th April, 1835, fifteen workmen lost their lives in consequence of an explosion at the colliery of Triel-Kaisin; on the 6th December following fifteen workmen perished, by the same cause, at the colliery of Kessels—five others were severely wounded; on the 16th May, 1836, an inundation destroyed twenty-nine workmen in the colliery of St. Victoria; on the 14th June following twenty-two workmen perished, by the explosion of carbonised hydrogen, in the colliery of Grand-Buisson; sixty workmen perished, suffocated, or burned, on the 22d June, 1838, at the colliery of Esperance, at Stering; on the 8th April, 1839, a flood caused the death of fifty-five workmen at the mine of Horion. But how many victims perished isolated, without attracting public compassion towards their families? Is some of the disasters which I have noticed, Royal munificence, the budget of the state, or individual subscriptions, came in aid of the relations of the victims; but the greater part of them received no relief.

I hope, Sir, to be able soon to submit to you unpublished documents on the cause and nature of the accidents which have occurred within the last twenty years in the mines of Belgium. I shall now give you a summary of these last twenty years, from 1821 to 1840 inclusive:—

Accidents.	Killed.	Wounded.	Total.
Province of Hainaut	495	410	905
District of Charleroi	42	32	74
Basin of Centre	13	26	39
Province of Namur and Luxembourg	33	27	60
Ditto of Liège	579	412	991

Total in Belgium 1,942 1,719 3,661

The explosions, caused by the inflammable and the degeneration of carbonised hydrogen gas, are the accidents which, if not the most numerous, are the most destructive. The following is a separate summary of these:—

Accidents.	Killed.	Wounded.	Total.
Province of Hainaut	44	144	188
Ditto of Namur and Luxembourg	3	1	4
Ditto of Liège	50	293	343

Total in Belgium 104 428 532

Thus, during these twenty years, 1302 serious accidents have occurred; 3392 victims have perished, or have been severely wounded or maimed—thus making a yearly average of 133 victims on a population which may be fixed, approximating during these twenty years, at 28,000; 818 individuals have been victims of explosions; but the 1710 workmen who in all perished during that time had wives and children left in misery. In valuing at four the number of the unfortunate whom they abandoned without resources, we shall have a total of 6880 suffering beings.

At last the extent of the calamity at the mine of Esperance created sensation. The archives of the department of public works contain several positions which were made on the subject. M. Auguste Vinschoot, at present director of the administration of mines, published, a few weeks afterwards, an article, which was inserted in the *Revue Belge*, and which the *Revue Universelle* has republished; it is entitled, "On the Establishment of Relief Funds in Belgium in favour of Working Miners." One of my predecessors distributed several hundred copies of this work among the coal owners in different parts of the kingdom. As the delegate of Government, and in virtue of his own official functions, M. Vinschoot proceeded successively to Liège, Namur, Mons, Charleroi, and Faïenciers-Sainte-Barbe, in order to explain advantages of miners over the advantages of relief funds. The provinces of Liège and Namur (the fund of the province of Namur comprehends the province of Luxembourg) acquired relief institutions by decree of your Majesty, dated 24th June and 1st December, 1839. The regulations relative to relief funds of the districts of Mons and Charleroi have been sanctioned by Royal decree of the 20th and 21st December, 1840. Finally, a decree of your Majesty, of the 26th September last, has approved of the regulations of the fund of the district (Hainaut).

The report, after noticing what laws, regulations, or practice exists relative to the subject in Germany, Great Britain, and France, proceeds to its most important division—namely, the actual state of the relief funds in Belgium. The organization of relief funds in favour of working miners is throughout the same in the five subdivisions of our coal basin. The statutes have been approved by your Majesty. The Governor of the provinces (at Charleroi, the commissary of the district) presides over the administrative commission. The chief engineer of Government, or an engineer delegated by him, constitutes, of right, a part of this commission; the commissioners are composed of coalowners and miners; they render annually an account of their administration, which is addressed to the Governor of the province and to the Central Administration of Mines. The amount of the pensions is not fixed—it varies according to the wants of the persons who are to be relieved. It has been thought advisable not to specify any particular sum. The widows of workmen who have perished by an accident, their father and mother, if supported by them, receive an annuity for life—an allowance maximum or minimum depending on the circumstances of the accident; the children receive aid until they are able to care for themselves. Besides these aids, which are called ordinary, the administrative commission are authorized to distribute extraordinary relief to relatives of the victims, who have no right to the pension, in case they stand in need of it—to old workmen become infirm—miners maimed, but not incapable of all work. It is regulated by the statutes that, co-existing and co-existent with these ordinary relief funds, each mine shall have a particular relief fund. The common fund grants pensions in the case of serious accidents, causing death or incapacity of work; the particular fund provides for the wants of workmen wounded or sick, &c. The association thus assists itself in providing for the most serious cases; the action commissary who has the resources of each district establishes what will be required to meet these cases.

These resources are composed of—
 1. Of contributions of the miners.
 2. Of contributions and subsidies of the Government.
 3. Of donations and legacies of individuals. The sums levied on the wages of the workmen, for the common association, is only 1 franc per month; the miners contribute a sum equal to that paid by the workmen. The Legislature, in the budget of 1840, has voted subsidies in favour of the Miners' Relief Fund. These subsidies have been allotted as follows:—

Fund.	1840.	1841.
Miners' Relief Fund	62,000	62,000
Miners' Relief Fund	62,000	62,000
Miners' Relief Fund	62,000	62,000

* For this, as for most, in Brussels, "surveillants théâtre," the uniforms being not merely to give notice, but to give the miners access of entrance, and to make them prominent.

Independently of these resources, the Liège fund has an annuity of 3000, on the Great Book of France, arising, as I have said before, from the old relief fund established in the department of the Ourthe. A decree of your Majesty, dated 20th September, 1838, has granted the enjoyment of this annuity to the new institution. The provincial council of Hainaut voted, for two years consecutively, a subsidy of 3000, in favor of the relief fund established in the province. Finally, three establishments, the General Society for Advancing the National Industry, the Society of Capitalists, united for the object of Mutuality, and the Society of Commerce of Brussels, have given a donation to the relief fund of Mons of an annual subsidy of at least 3000, specially for the purpose of the instruction of the children of miners. Besides the aid which the relief funds afford, the administrative commissions can, by virtue of these statutes, apply out of the reserved funds sums for the education of the children of the associated miners. Thus the institution, in providing for the moral wants of rising generations, contributes to ameliorate the future condition of the working miner—the benefit is not limited to the satisfaction of physical wants.

The Belgian coalowners have exhibited humanity and a sound discretion in paying into the fund a quota equal to that which the workmen pay. It is to be observed, that the association exists among the owners, and not directly among the workmen. The subsidies allotted by the Legislature in favor of the association have decided the owners who were irresponsible; rather than expose themselves, in remaining isolated, to all the consequences of accidents, they have found it their interest to form part of the association. At present the greater part of the owners are parties to these institutions. The relief funds of Mons and Charleroi have only existed for a year—that of the Coal basin was only established on the 1st October, 1841. We may then be proud, Sirs, of the following result:—

COLLECTORS.	WORKMEN EMPLOYED.	TOTAL.

<tbl_r cells="3" ix="3" maxcspan="

BRYNDU IRON-WORKS SALE, GLAMORGANSHIRE.—
Mr. W. WHITTINGTON begs to inform the public generally, that (having completed them where this property was recently advertised for sale, in consequence of the rent having been paid) he has now required positive instructions to sell, by auction, on Thursday, the 15th, and following days of June, the whole of the material of the BRYNDU IRON WORKS.—Further particulars will appear in next advertisement.

Just published, in 1 vol. 12mo., with plate by Martin, and 16 wood-cuts, £6.
GEOLGY FOR BEGINNERS, comprising a familiar Explanation of Geology, with its associate Sciences, Mineralogy, Fossil Geography, Fossil Botany, Physical Geology, and Palm-ontology.
By G. F. RICHARDSON, F.G.S., of the British Museum.

MEETINGS OF SCIENTIFIC BODIES.
IN THE MINING WEEK.

SCIENCE.	PLACE OF MEETING.	DAY.	HOUR.
British Architects	19, Grosvenor-square.	Monday	8 a.m.
Medical	Bolsover-street	Monday	8 a.m.
Civil Engineers	25, Great George street	Tuesday	8 a.m.
Society of Arts	Admiral	Wednesday	7 a.m.
Geological	2, Queen's House	Wednesday	8 a.m.
Zoological	27, Pall-mall	Thursday	8 a.m.
Royal	Botanical House	Thursday	8 a.m.
Antropological	Botanical House	Friday	8 a.m.
Royal Institution	Albemarle-street	Friday	8 a.m.
Botanical	29, Bedford-street, Cornhill	Friday	8 a.m.
Scientific	14, Grosvenor-street	Saturday	8 a.m.
Mathematical	Crispin-street, Spitalfields	Saturday	8 a.m.

PUBLIC COMPANIES.

MEETING.	MAY 25	JUNE 1
North-Cawl Iron and Coal Co.	May 25	2
Argyllshire Mining Company	2	2
London Bank	2	2
South-Eastern Railway	2	2
East-Frixiell Mining Company	2	2
Cornishian Mining Company	2	2
Western Australian Company	2	2
New Zealand Company	2	2
Thomas and Hosney Co.	2	2
United Hills Mining Company	2	2
Imperial Brazilian Mining Ass'n.	2	2
Stockton and Hartlepool R.Way	2	2
Royal Polytechnic Institution	2	2
Bank of Australia	2	2
Grand Union Canal	2	2
Basingstoke Canal Navigation Co.	2	2
Danbury Railway and Dock Co.	2	2
Grand Junction Canal	2	2
Bank of British North America	2	2
Mexican and South American Co.	2	2
London Consolidated Mining Co.	2	2
South Consolidated Mining Co.	2	2
West-Wales Jewell Mining Co.	2	2
Commercial Steam Packet Co.	2	2
Theriot Mining Company	2	2
London and Birmingham R.Way	2	2
Camerton Iron and Steel Co.	2	2
Imperial Brazilian Mining Ass'n.	2	2
Anglo Mexican Mining Co.	2	2
May 26		
10 a.m., June 21	Sept. Buxton, and Co.	
10 a.m., July 1	As former calls.	
10 a.m., August 2	L. & J. Jobst Stock Bank	
DIVIDENDS.		
10 p.m. per share Winchester House	May 25	
10 p.m. per share 2, New Broad-street	June 1	

NOTICES TO CORRESPONDENTS.

BRIEF NOTICES.—In another column will be found some remarks on the success which has attended various trials of the impregnable measures of Messrs. Chapman and Co., which, it appears, not only perfectly effect the consumption of timber, but also, among other advantages, occasions a considerable saving of time. We recommend these observations to the attention of persons of those (and who are not) interested in the important subject of the combustion of smoke.

The Great Train—the New Taxies.—Some articles, inserted in another column, on this subject will be found in this edition.

Quotations.—In our last issue the price of quicksilver was erroneously quoted as being 4s. 6d. per lb., which, it appears, has created some alarm to those interested in Mexican mines, as indicating a rise of 1d. per lb. in that article, the price should have been, as it is now, 4s. per lb.

Mines in IRELAND.—KNOCKAWHAGH MINE.—We have several letters in type, among which are "Boycie of Mr. Petreys"—"A Shareholder"—and "A Cornish Mine-Advertiser"—the insertion of which is unavoidably postponed.

We are indebted to the Editor of the Cornwall Gazette, for his attention in forwarding slips of the important meeting of the Mining interest, inserted in another column. Mr. THOMAS's second lecture on Geology, together with several letters and papers, are however postponed.

The New Taxes.—We have adopted the Times' report of the discussion, in the House of Commons, on Wednesday night, which will be found in another column.

To Agents and Captains of Mines.—The Editor will feel much indebted to Captains, and other Agents of mines, above and at home, by the transmission of specimens of ore, labelled with the usual designation of the mineral, and also the sides with the view of placing them in a collection now being formed. A copy of the classification of the greater number of the various districts—other things such additional information as can be required. Please, no actions of justice, with particular as to the direction and ordering of hills, with names of persons, even come in, for, as will be highly acceptable, and will be placed in cases, with reference to, of any kind, to make by hand labelled. It is proposed, from time to time, to give papers, relating on particular districts, in the columns of the Journal, with an illustrative plan, or sketch.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, MAY 28, 1843.

The meeting of the Mining Interest of Cornwall took place on Monday, a report of which we have inserted, as also the resolutions and memorial adopted. Mr. TREFFRY, the indefatigable "miner's friend," at once proceeded to London, unsupported by any but it is gratifying to us to be able to state that already that gentleman has done much at two interviews with the Vice-President of the Board of Trade, in having, we believe, convinced him of the impolicy and injustice of the measure. It is quite clear that the question is between the smelter, the foreign miner, and the home mining interest; difficulties have, however, been overcome to some extent, and we trust that ere another day passes by, Cornwall and our home mines, if not protected to the extent we could wish, will not be entirely sacrificed. Mr. TREFFRY deserves the thanks—the gratitude—of the Mining Interest and the working miner. It is also due to Mr. W. H. VIVIAN, as chairman of the committee in London, to state that he has had further interviews with the Minister, and has submitted another memorial.—All hope is not yet lost.

BRITISH MINERS.—You may know that out of six hundred and fifty-eight Members of the House of Commons you can reckon upon nine who, in a case of emergency, may be brought to vote in your favour, on a measure which is to your life or death!—When you reflect on the number of Members returned by you, it is, perhaps, not so much suspect as that to which you may consider yourselves entitled. But you must rest content—the House of Commons will it do, and your representatives!—accord with the desire of the Government, the smelter, the foreign miner, and the slave owner.

With the Tariff—or, at least, so much as affects ores, minerals, and metals—has, as we prophesied, passed through the House without any amelioration in favour of the British miner—Ministers very consistently having, on the "Dobie" day, brought on the consideration of that portion of the tariff, when a majority of the Members might be expected to be on the cause at Roman instead of at Mr. Stephen's. It is now useless to adduce either new arguments or to recapitulate those which have been submitted without effect, and it remains for us, therefore, only to consider the position in which we are placed—to reflect on what measures should be adopted for protection, if such can be in any shape or condition; and, further, not only to investigate the conduct of the "wolves" in sheep's clothing, the "disorderly" and "traitors in the camp," but to incubitate a practical moral lesson, whereby the weak and defenceless may know how far their interests or welfare is considered by the Ministers whom he sends to Parliament. The shameful conduct exhibited by the Government—the poor man's friend—the master—the foreign master—the free trader—and those whose duty it is to protect the rights of the working miner, can hardly be

concealed. Such conduct was exemplified in the House of Commons, on Wednesday night last, as must reflect a lasting discredit on a body of men who profess themselves to be the friends of the poor, who ought to possess intelligence, but who would not even listen to the arguments brought forward—either not having a disposition to protect the miner, or who, having returned from the race-course, forgot that the change of locality altered their position from that of betting on a race-course to legislating for the country. We cannot help expressing ourselves in strong terms as regards the conduct of the House as a body, while we shall not be niggard in our observations on those who were either too cowardly to appear on the arena of discussion, or who, like Lord ELIOT and Mr. CHARLES BULLER, took a course opposed to the interests of the working miner.

The opinion we entertained of Mr. TURNER's amendment we have already expressed, and the result has proved that we were correct in our conclusions, for he was met by Mr. GLADSTONE, who said quietly, but with much meaning, that the honourable Member, even by his own showing, asked for nothing—for if his case, as made out by him, was good, then it was clear he went not far enough—yet, said the Vice-President of the Board of Trade, the boon, however trifling, we will deny him; but, at the same time, it is right to tell the honourable Member what we will do, we will alter our tariff to this extent, we will, instead of making ores above 25 produce pay 7L 10s. duty on the ton of metal, we will allow all ores, up to 45 produce, come in at 6L. We will adhere to our sliding scale of 1L 10s. under 10 produce, 3L under 15, 4L 10s. under 20, and 6L under 45; this alteration being necessary, or at least so said Mr. GLADSTONE, to protect the Chili Mines. Such is the alteration proposed by the Minister, one inflicting further injury on the home miner, while he refuses to him protection.

The case is simple, and neither Sir ROBERT PERE, Earl RIPPON, nor Mr. GLADSTONE can deny the correctness of our representations, for they are before them in their official capacity. The mines of Cuba last year divided 160,000L. profit (exclusive of the reserve fund), on 30,017 tons of ore—amounting to 47L 25L. 3s. 6d.—which, at 18 produce, would give 5457 tons of copper, yielding 3L 6s. 3d. profit per ton of ore, or 29L 6s. 6d. on the ton of cake copper. If we turn to the mines of Cornwall, we shall find that the profit on those mines yielding surplus returns did not exceed 12s. 6d. per ton on the ore, or, at an average produce of 8—say 7L 10s. on the ton of copper—which is counterbalanced by the unproductive mines—and yet the mines of Cuba, possessing the advantage of smelting in this country, selling their cake copper at 10L per ton under that obtained in the British markets (to which they are now to be admitted), derived a profit of nearly 30L per ton, while it is now proposed they are to be subjected only to a duty ranging from 1L 10s. on the ton of metal to 7L 10s. on ores yielding more than 45 produce. It is, however, useless to adduce facts or argument, and we must, therefore, consider those points to which we have already adverted, and we now call upon the working miner, and him alone, to protect himself, by petitioning her MAJESTY THE QUEEN—for, as to Members of Parliament, the Lords, or others, they will do nothing, and will only feel the consequences when the working miner is brought to a state of destitution.

We must not, however, lose sight of the representatives (?) of the county of Cornwall, and other mining districts, and, before entering into the question as to the course to be pursued, it will be well to show how far they supported, injured, or neglected, the mining interests. Let us take, then, first, the county Members for Cornwall. We have Sir CHARLES LEMON and Mr. PENDARVES representing the western division—Lord ELIOT and Mr. RASHLEIGH the eastern. True it is that the two former voted with Mr. TURNER on his amendment, but they both knew that not only was the amendment of no value to the miner, but that it would not be carried; therefore, we are not willing to award them the merit which at first sight would appear their due. Sir CHARLES LEMON, by his pamphlet, tended to destroy the mining interest of Cornwall; and Mr. PENDARVES has shamefully held himself aloof, and has not taken the part which his position, as well as his connection, with the county would have justified him in doing.

Next we have Lord ELIOT—how are we to deal with him? Why his speech in the House, when he said he could not accede from Government, whose measure he adopted (regarding it as "a part of a whole"), at once showed that he valued office more than the interests of those constituents by whom he was returned, at the same time confessing that he was ignorant of the merits of the question submitted to the House, and thus demonstrating his unfitness to represent Cornwall—a man confessedly ignorant of his mining interest; no matter what party he may belong to, whether Conservative or Liberal, it will be a disgrace to the county if they ever again return him—they cannot. As to Mr. RASHLEIGH we are informed, and we are bound to believe, that he was "shut out" unexpectedly, and, therefore, prevented from voting in favour of Mr. TURNER's amendment. It is the best excuse he can make, and we will believe, as we hope will his constituents, that had he not been "shut out" he would have voted with the minority. We will now take Falmouth—where was Capt. VIVIAN? Why, the answer is ready—as son of Lord VIVIAN (the smelter) he absented himself—it was modest, and his modesty may be admired by those who returned him.

As to Captain PLUMBEOR, we have reason to believe he was with the miser, but circumstances might preclude his voting on the question. Now, then, to Helston. Here we have a gentleman—Sir R. VIVIAN—who, from his interest in the vicinity of the borough he represents, a borough dependent on the working of Wheal Vor and other mines in the district, might have been expected to have represented to the House the views he entertained. We find him to be absent. Why is this? We know that the hon. Member is decided in his opinion, that the measures of Government, as relates to the tariff, are fraught with danger to the country generally, and more especially as regards the mining interest of Cornwall. He may say that he could not support Government in the measure, nor could he give his vote in favour of the amendment of Mr. TURNER, because he did not think it went far enough. This we can and do believe, but yet we say, it was his duty to have stated to the House the opinions he entertained, even if he did not vote on the question. We think the hon. Member, at least, owes it to his constituents, and to himself, to explain the apparent disregard manifested on his part of the interests of the mining district with which he is so intimately connected.

Let us travel a little further. We have Mr. CHARLES BULLER, a gentleman who, if talking in the House would make him popular, ought to be Prime Minister. We find him on all subjects, whether Newfoundland or New South Wales, to take part; agriculture claims his attention, and we do not know whether he did not "discourse" on horticulture; but, as regards the Cornish miner, he gave his vote against him. Where, again, was Major VIVIAN, another gallant son of Lord VIVIAN (the smelter)?—he who charged the administration with withholding information on the subject of the admission of foreign produce (beef), and was convicted of having obtained his information from an untrustworthy source. He must needs be absent. As to Sir HENRY HARROLD, his vote was given for the Minister, and we do not suppose he for a moment considered the question, much less its merits. Mr. PAARMAN, for St. Ives, although unengaged, was absent; his motives will be best understood on a slight inquiry, for we believe him to be too honest to dissemble. The Earl of LEICESTER thought fit to vote against the

winner, while other Members deemed it prudent to take no part; we must not, however, presume upon the office of the Cornish press, who we hope will, "one and all," give the respective Members their deserts.

But we leave this part of the subject, let us, however, give to those Members who supported the proposed amendment that merit which is justly their due. To Mr. E. TURNER, however, unimportant, in our view, was the amendment proposed by him, he did, under all disadvantages, fairly and plainly state to the House—unawed by the "disorderlies"—the state of the Cornish miner, and that in which he must be placed, if the tariff became law. The working miners of Cornwall, and the mining interest of Great Britain, are indebted to that gentleman for having had the "hardihood" to "bear the lion in his den," to tell home-truths which were hardly listened to; and also to Mr. W. OWEN STANLEY (the Member for Anglesey), for his support of that gentleman; to Colonel ACTON, as the only representative of Ireland, we feel that the Sister Isle is greatly indebted, and the mining interest are bound to return him on all occasions, without regard to political principles—while it is a disgrace to its Members generally that they did not oppose the Government measure, which has for its object the employment of the foreign slave to the extermination of the Irish miner. Our thanks, and those of the miner, are due to Mr. GILL (the Member for Plymouth) and Sir ANDREW LEITH HAY, who voted with the minority; to Mr. J. E. VIVIAN (the Member for Truro), as well as to Mr. DAVID MORRIS (Member for Carmarthen), the miners are also indebted—making, with those we have enumerated, nine in all. Having thus noted the Members for Cornwall, who voted "for" or "against," or who abstained themselves, we must needs make a passing remark on the other mining districts, which, perhaps, to save space—for the Members are unworthy of it being devoted to them—we may class, and merely express the opinion which will, we believe, be entertained by all their constituents dependent on the mining resources of this country—viz., that their conduct reflects disgrace only on themselves, while it is greatly injurious to those interests they represent. Mr. ALDERMAN THOMPSON, who is known and acknowledged to have the ear of the Minister, he was, of course, in the majority; and Mr. FERGUSON, professing to be the poor man's friend, yet is found to vote for the employment of the slave abroad—depriving the industrious miner at home of the means of support. It was our intention to have said much more as to the course to be henceforward pursued, but having been furnished with certain information, as will be observed by the preceding article (Mr. TREFFRY, as an honest and independent man, having again put his shoulder to the wheel), we reserve until next week any further remark. We cannot, however, close this article without again repeating our recommendation to the WORKING MINER—"act for yourselves!"

That public companies are most extraordinarily constituted no one can doubt who will peruse the reports which occasionally appear in the Journals of the day, although it is not all who will allow the distant shareholder, or the public, to be in possession of that information which may guide them as to the stability of the undertaking.

Meetings of the present week call for this remark, inasmuch that we find, at the meeting of the National Bank of Ireland, on Wednesday last, Mr. D. O'CONNELL, M.P., who presided on the occasion, expressed his learned opinion that auditors were never required, except in bankrupt or ill-managed concerns. We are not aware whether there are auditors to the "rent," or to the "Repeal Association," or any other with which Mr. O'CONNELL may be connected in Ireland, and yet we think that such description of persons have, in some one case or other, been appointed (we do not refer to the "rent"), but that Mr. O'CONNELL, or any man claiming honesty of purpose, should, at a public meeting of shareholders, say that auditors were unnecessary, is hardly to be credited, for such principle (if principle it could be termed) is totally destructive of all notions which we entertain of business, however it may serve Mr. O'CONNELL's purpose, or his colleagues, to keep the accounts to themselves.

We will now take the instance of the proceedings at a meeting of the shareholders of the St. John del Rey Mining Company, held yesterday, whereat Mr. POWERS, a gentleman pretty well known from his connection with multifarious concerns, presided. A resolution having been regularly proposed and seconded, to the effect that no further call should be made without a meeting of the proprietors being first convened (the motion having been made in consequence of 10s. per share being called for immediately after the last meeting, while the representations of the directors induced the shareholders to suppose that they would be more likely to receive a dividend), the chairman (Mr. POWERS) declined to submit the proposed resolution, or, in other words, be a paid servant of the company, refused to put the question, on the grounds that the directors ought to have the power, and would make calls whenever they thought fit, inasmuch that they rendered themselves responsible. Such is the opinion entertained by Mr. POWERS, who need not further destroy public confidence, which has already been too much affected by secret combination, and attempt to usurp an arbitrary power. We have been always led to suppose that it was the duty of the chairman of a meeting to submit any resolution, duly moved and seconded, which might form subject matter for consideration, but Mr. POWERS seems to entertain a different opinion, and, although he is, we are aware, not singular; yet we should like to know, whether these paid directors—these delegated servants of the proprietors—are thus to act with impunity? A case occurred some few weeks since, on which we did intend to have offered some remarks at the time—we refer to a meeting of the "Blaenau Bridge Mining Company"—on which occasion one of the proprietors moved a resolution to the effect—"That a committee of five shareholders should be appointed, to examine the accounts of the company, and to report thereon," and having applied to the solicitor of the company, who was present, to draw up such resolution in a legal form, Mr. BAXENDALE contended that he was the solicitor acting for the directors, and not for the shareholders, and rather than prepare such resolution he gave up his office as solicitor, although that gentleman has, we find, from a communication received since, resumed the post of profit, if not of honour. The determination expressed by the solicitor, gave tone to the chairman, who refused to put the question, and quitted the chair abruptly, thereby dissolving the meeting; but it is too clear that boards of directors, in most cases, consider themselves as a separate interest to that of the shareholders, and perhaps they are right—for they get a dividend in the way of salary on the capital embarked.

Nelson's Hot-Blast Patent.—Nelson v. THOMSON.—It will be in the recollection of our readers, that a bill was filed by the plaintiff, at the present of the hot-blast for increasing the heat of iron furnaces. To compel the defendant and certain other ironmasters to fulfil an agreement for the payment of a sum of £1. on every ton of iron made by the new process. Lord Cottenham made a decree in his favour in 1841, and that decree has been drawn up in the usual form.—Yesterday, in the Court of Chancery, Mr. Richards and Mr. Russell applied, on the part of the defendants, to alter the decree, on the ground that it omitted any notice of the payment of the shilling, which was part of the price of the bill.—Mr. Bostock opposed the application, on the ground that it was to the power of the court to make the required alteration without hearing the cause, and that could not now be done, as it would amount to a retrial of a matter already tried.—The Lord Chancellor said he could not, on a mere application of this nature, take the responsibility of altering the decree. The parties

THE NEW TARIFF—EXPORT DUTY ON COALS.

A correspondent, writing on this subject, states, that he has reason to believe, it is from information derived from a celebrated Professor of Geology, that Sir R. Peel has consented to the proposed export duty on coal—the measure being recommended to him on the ground “that foreigners must come to England for coals.” How far that assertion is, and is inserted an account of a valuable discovery of coal at Cuba, and scarcely a week has passed for months but that attention has been directed to similar discoveries in different parts of the globe, while the mines of Belgium, being at present only of trifling depth, “is it not (our correspondent adds) reasonable to suppose, that the quality of the coal may improve or sink deeper?” Let, then, the Government pause are they very a measure fraught with such injurious consequences to our coal districts as the one now before the House, and reflect on results that must inevitably follow—the ruin of the mines, and the thousands dependent thereon for their subsistence. Indeed, the *Morning Herald* states that mercantile correspondence from Rouen already indicates the accuracy of frequently-expressed opinion as to the effect Sir R. Peel’s proposed extension of the export duty on coal would have in displacing the consumption of British produce on the Seine. Rouen, it will be recollect, is the limit where British coal from the sea comes into the most severe competition with Belgian coal introduced by canal; at the commencement of the present year British coal had gained supremacy in that market. The very announcement of Sir R. Peel’s fiscal addition to the export price of our coals has, however, given the turn of the market at Rouen to the Belgian article. The Belgians are, we learn, pouring in large quantities to Rouen in anticipation of the imposition of the proposed tax, and are “pricking up,” to use the expressive language of a commercial paper, in that market. There can be little doubt that the proposed export duty will cause the loss to England of the markets of the northern parts of France; and this is a loss which our coalowners can now just ill afford. Such a loss will, moreover, lessen the amount of revenue which Sir R. Peel proposes to raise from the exportation. It is, therefore, to be earnestly hoped, that this tax on coal will be so modified as to inflict no such injury on the coalowners. If Sir Robert Peel must raise money by an export duty on coal, let him so impose it as not to check exportation, or give a advantage to foreign shipping.

COAL MINES IN CUBA.

We are indebted to Silliman’s *American Journal of Science* for some interesting particulars respecting the discovery of coal in Cuba, and the progress made in its examination, translated for our valuable contemporaneous by Mr. John H. Blake, of Boston, from the original of M. Castaños, in the *Diario de la Habana*.

The mine, it appears, is situated in the Partido de San Miguel, about six miles from Havana, and is particularly interesting, on account of its locality and the quality of the mineral. The coal is of two kinds, one of which, denominated “chapapot,” is the most abundant; 100 parts of this yielded fifty parts of volatile matter, and afforded by analysis—Carbon, 71.84; oxygen, 6.22; hydrogen, 8.40; ashes, composed of silica, oxide of iron, and sulphur, 13.51.—Total, 99.97.

The abundance and good quality of the coal are the two particulars embraced in this article, to which we should like most assuredly to give a greater extension. Almost at the lower extremity of a hill, whose inclination is not very steep, they have opened a rectangular well of four yards in superficies, and eighteen in depth, and at one yard excavation they met the coal, which continues to the above-mentioned depth, the quality of the ground being, as well as at this point as in the others, a calcareous and ferruginous layer. At the distance of forty-five yards up the declivity, they have opened another well, three yards wide, two broad, and forty deep; in this place the coal was found at the depth of seven yards, and continues to the bottom, at which point, and in the centre of it, they made a hole of fifteen yards, always meeting with coal. At the four sides of the bottom they have opened a straight gallery, thirty yards in length, in which the vein continues horizontally without any interruption. In this well terminates another gallery, which, opening from the bottom of the other, communicates with this, the drain being obtained by means of cans. On the road to Tapate, and on the summit of the hill, at a distance of 400 yards from the preceding well, they have opened another, the vein of coal beginning at the depth of fourteen yards. It results, then, that in the small space above-mentioned, is found a vein of coal of forty-eight yards perpendicular, and more than sixty in surface, in the part hewed up to the month of April last, interrupted with layers of stone, and some spots of chalk, though of small extent, and rare. The bed of coal is almost horizontal; the difference of the depth at which it is found is one yard in the first well, seven in the second, and fourteen in the third, depending upon the variation of the surface of the declivity of the hill. The mine Prosperidad was examined by Mr. San Richard, an English engineer, who came to Cuba for this purpose; he wrote to the society the following, which we take from a copy now under our eyes:—“Descending into the well I became astonished at seeing such a vein of coal; never have I seen or heard till now, that there is in other places a similar vein, and I believe that I should not be mistaken in saying, that there are few persons who have seen another so extraordinary as this. The coal from the surface, to the depth of a few yards, appeared to me to be charged with bitumen, and a coal of very good quality for coke; that which I have seen made with it, is, in my opinion, of superior quality. From the above mentioned distance to that of forty or fifty yards that I descended, the quality of the coal changed much to its advantage; it is less bituminous, contains a greater quantity of oxygen, and is much more compact. Now at the bottom of the well galleries opened to the four winds, to the length of twenty or thirty yards, and it is all around full of coal. There also at the east a gallery a few yards from the bottom, to the extent of forty or fifty yards, all surrounded with coal, so that they see nothing else on all sides.”

COALS, CINDERS, AND CULM.

In the Journal of the 30th ult., we published some particulars from the Parliamentary Returns, recently issued; we then stated that the total quantity of coals exported from the United Kingdom, from the 5th day of January, 1842, to the 5th day of January, 1843, was as follows:—

1842	352,864 tons.	1843	76,000 tons.
1842	371,971 "	1843	916,818 "
1842	304,419 "	1843	1,113,810 "
1842	510,831 "	1843	1,313,709 "
1842	569,646 "	1843	1,449,417 "
1842	634,449 "	1843	1,646,313 "
1842	613,353 "	1843	1,845,394 "

Of these, in 1842, Denmark took more than any other country (61,353 tons); Germany, the British West Indies, and the Channel Islands and Mex., being the next largest importers. In 1843, and, indeed, ever since 1838, France has taken more of our coals than any other country. The following are the numbers and amounts, exceeding an import of 100,000 tons:—France, 41,000 tons; Germany, 173,637; Holland, 173,372; Denmark, 151,145; and Prussia, 116,398. The Brit. in West Indies, the Channel Islands, and Mex., take about the same quantity respectively. The declared value of the coal, &c., exported from the United Kingdom, in 1842, was £79,139; in 1843, £12,307. In 1843 the following were the exports of coal, culm, and shales, and declared value thereof, from the ports specified:—

Newcastle	700,000	£275,589
Banbury	400,018	106,800
Buckingham	169,345	48,307
Liverpool	119,949	34,604
London	30,795	9,906
Bornemouth	81,103	23,701
Hull	37,094	10,819

Of the coals exported in 1843, the duty payable on exportation to foreign ships was £10.00, 1s.; in British and s. 10d.; 1s. 6d.; 1s. 10d.; in foreign ships, £1. 1s. 6d. per cent., ad valorem, in British ships, £s. 10d. per ton. On the ports shipping coal, &c., notwithstanding, in 1843, the following are the principal:—Newcastle, £1,027,627; Stockton, £463,618; Banbury, £21,000; Newport, £66,329 tons. The total quantity so shipped amounted to the ports of the United Kingdom, in 1843, was 7,669,500 tons; in 1842, £411,677 tons. On the exports to foreign countries in 1843, £1,000,142 tons were to British shipping—£68,424 to foreign shipping. Of the remaining countries we find that Sweden, Norway, Denmark, Prussia, the United States, and the Philippines, import more in foreign ships than British vessels. The United States imported in one year 16,846 tons in British vessels, and 16,937 tons in foreign vessels. The exports to British provinces, in the same year, were 200,000 tons in British, and 600 tons in foreign shipping.

THE NEW TARIFF—EXPORT DUTY ON COALS.

The following statement of the effects that are expected to be produced on the English coal trade by the proposed tax of 6s. per ton on coals exported, and reasons for opposing the same, are worthy attentive perusal:—“The several statements recently submitted to the public have clearly demonstrated that the export trade in coal is one of very recent growth, and that its rapid extension since 1834 has been owing to the repeal of the previously existing duties. The proprietors of those collieries whose coal is chiefly exported, seeing the demand that has followed, have, under the fancied protection of the law of 1834, expended a large capital in opening out their collieries. An entirely new coal district has been recently called into existence, and a public harbour lately constructed at Workington, in Northumberland, at the expense of the owners of colliery works, which would never have been undertaken but under the sanction of the law of 1834. If the effect of this proposed measure was such that the tax could be realized to the revenue, the coal owners would have no right to complain; but it must be conceded, when all the facts are fairly stated, that the real effect of this tax would be, not only to disappoint the expectations of the revenue, but destroy this important and increasing industry at the same time. This assumption will not only be amply demonstrated by reference to the state of the export trade in coal, before and after the repeal of the duty in 1834, but a glance at the history of the coal trade in other countries, under the existence or the absence of import duties, will still more clearly demonstrate it. It should be recollect that England is not the only country from which the continent of Europe can draw a supply of coal. England has the advantage over other countries, inasmuch as a great part of her coal lies in seaboard. Notwithstanding this, the greatest rivalry now prevails in foreign markets between the English and Belgian coal, besides which there is the great basis of Saarbrück, in Rhenish Prussia, from whence a large supply is now drawn, both by France and Germany. Again, both in Belgium and Rhenish Prussia, coals are brought to bank at a cost equally moderate with that of England, and the proposed tax will more than compensate those collieries for the single advantage possessed by England in her seaboard. It appears from Parliamentary returns that the quantity of coal exported in the year 1840 amounted to 1,006,313 tons; of this quantity one-fourth part, or 251,754 tons, was shipped to France alone, while in 1838 the total quantity exported from England, including the colonies, did not exceed 355,000 tons. A reference to the facts connected with the past progress of the French coal trade, as influenced by import and discriminating duties, will fully confirm the opinion on that any, the slightest, tax on coals exported will cut off at once one-fourth of our entire exports, independent of similar results which may be expected in regard to other countries. In 1788, before the French Revolution, English coals were admitted into France on payment of an import duty of 6s. 11d. per ton, while Belgian coal was subjected to a duty of 10s. 1d. per ton. The quantity of English and Belgian coal admitted in 1788, was—English coal, 184,773 tons; Belgian coal, 51,819 tons.

“After the peace in 1814, and on the opening of the Canal of Calais, the French Government, with a view to exclude English coal, and favour those of Belgium, placed an import duty of 12s. 9d. on the one, and 2s. 9d. on the other—which discrimination continued up to the year 1834. During this period the twenty years’ average annual imports of English coal into France did not exceed 30,000 tons, while the quantity of Belgian coal which entered France had increased from 20,000 tons in 1813 to 620,176 tons in 1834.

“In 1834, simultaneously with the abolition of the export duty in England, the French import duties were remodelled, and the following table will show with what rapidity the English coal trade has developed itself in France, when freed on the one hand from a tax on exportation, and on the other by the equalization of import duties.

QUANTITIES OF COAL, OMITTING FRACTION, IMPORTED INTO FRANCE FROM FOREIGN COUNTRIES, FROM 1834 TO 1840.

FOREIGN TONS.	BELGIAN TONS.	SAAARBRÜCK TONS.
1834	48,000	620,100
1835	98,000	615,100
1836	169,500	715,800
1837	222,600	788,400
1838	304,600	796,400
1839	340,300	740,800
1840	391,000	N. return.

* Add to tons (2 lbs.) to equalise the quintal metre to English weight.

“By the foregoing statement it will be seen what are the consequences likely to result in English enterprises under the proposed coal tax. Under the influence of the same state of things as is now sought to be re-established, the Belgian French coal trade increased from 90,000 tons in 1813 to 620,100 tons in 1834, and ultimately to 740,000 tons in 1839, while the English French coal trade, which was in 1788, 184,000 tons, did not average after the peace, from 1814 to 1834, more than 30,000 tons annually, but since 1834, under a new modification of duties on both sides, has increased from 48,000 tons in 1834 to 390,000 tons in 1840. To this may be added the development of the French coal basins under the exclusive systems that were in vogue from 1814 to 1834, the total produce of French coal mines being, in 1788, 225,000 tons; in 1814, 788,300 tons; and, in 1839, 3,123,910 tons.

“It is evident that the proposed tax will give an increased stimulus to the working of coal mines in France its N. and whiskers is no less than fifty-six departments. And further, it will be found that, without offering any equivalent to the revenue, it is calculated to ruin our foreign export coal trade, and seriously affect the multifarious emoluments and capital connected therewith.”

GENERAL MEETING OF THE MINING INTERESTS.

A numerously-attended public meeting was held at the Town Hall, Turn, on Monday last, the 23d inst., for the purpose of receiving from the deputation lately appointed at the Redruth meeting a report of their proceedings, and especially of their interview with the Board of Trade. Among the gentlemen present were J. H. Tramayne, J. T. Treffry, J. T. A. Roberts, J. Carne, M. Williams, T. S. Bolitho, A. Fox, W. Williams, J. Vivian, J. Ley, S. E. Enys, W. Carne, E. C. Carne, R. Pearce, C. K. Viger, W. Bolitho, W. Bolitho, jun., P. Williams, W. H. Vice, R. Taylor, S. Dwyer, J. Batten, R. R. Broad, J. Michell, R. Michell, J. Harvey, J. Haynard, and T. Trinder, Esq., Messrs. Newton, Hemings, James, &c. J. H. TRAMAYNE, Esq., in the chair.

The CHAIRMAN regretted that some one unconnected with the committee had not been appointed to the chair, but, by their favour, occupying that position, it was his duty to state, what they all knew from the advertisements, that it was the wish of the deputation to make a report of circumstances connected with the business for which they were appointed. Mr. Treffry, as chairman of that committee, would state, in detail, what had passed. He was sorry to say the circumstances would be found more unfavourable than they had expected when they met at Redruth. After all he had read and heard, and after all that had been hinted and stated, and all the suspicions that had been excited and printed, he must, standing there as an individual, express his unqualified opinion that no deputation could act more favourably, more honourably, and more entirely for the interest of this county, than their deputation had done, collectively and individually. That was his undoubted opinion, whatever may have been stated to the contrary. As to the circumstances under which they now met—certainly unfavourable circumstances—he took the liberty on a former occasion of stating what was their course in 1827, when the question of foreign ores was first started. Heated that they, with one voice, then attempted to prohibit their admittance altogether. A deputation, although headed by Lord Palmerston, had entirely failed. They pressed for prohibition. He was told immediately afterwards, by an authority he could not doubt—the late Mr. Davies Gilbert—that he well knew that if they had contented themselves with protection, in the shape of duty, they might have had that to a very large extent. What would have been the consequence of so repealing the great produce of the Coal and other mines, it was not for him to say. They knew that foreign ores had been many years admitted into this country for the purpose of being smelted and re-exported, and that the quantity imported now was equal to 10,000 tons of copper, which was smelted in lead, and afterwards exported. It was now vain to think of stopping these mines, or at all successfully impeding their progress. Their produce would come here, and the only question this meeting had to consider was, whether it was not fair that they should pay for the indulgence now proposed for the best mines—that of meeting British copper in the home market—whether they should not pay for the convenience of having our mines and being smelted here, by as large a duty as Parliament can impose consistently with the great object of Government—that of having all the ores of the world smelted in this country? That would, he conceived, be the subject this meeting would have to settle—whether they were satisfied with what the Government had done, or whether they would propose to have the duty on foreign ores increased?

Mr. TACKEY, who was granted with loud cheers, said, having had the honour of being chosen chairman of the committee appointed at Redruth, he would state, that they had met at Tredegar the following week, and had come to certain conclusions on which they framed a memorial, a copy of which he held in his hand. The deputation proceeded to town, and the day previous to their proceeding to the Board of Trade they called on Sir Charles Lemon, who had been kind enough to procure them an interview

with the greatest part of the Cornish Members and some other gentlemen, for the purpose of discussing the subject. On their arrival at Sir Charles Lemon’s, they unfortunately learned that from the time of their meeting at Redruth, to that of their arrival there, a new tariff had come out much more alarming to them than the former one, inasmuch as the duty intended to be proposed was much diminished, and that by that tariff, low produce ores were to come in at 3s. per cent. The new tariff having taken them completely by surprise, they requested to be allowed to present another memorial, that they might notice the effect which the low prices ores would produce on this county, coming in at so low a duty; because they considered that all the poorer ores, thrown by for many years, would now be brought here. That was granted them, and they had no reason to complain of the reception they met with, because every attention was paid to their representations, and he thought he never heard stronger evidence given to establish the fact that there was no chance of their driving out the foreigner from smelting ores in this country. Mr. M. Williams was examined a long time, and after having given them some evidence, they committed his opinions to writing; and he (Mr. Treffry) thought they had established their case. With regard to tin, Mr. Bolitho and Mr. Carne underwent a long examination. With regard to china-clay, manganese, and some other semi-metals, a discussion took place. The answer of Mr. Gladstone was, that it was not their intention at all to let poor people suffer anything by the duty they had put on; nor was it, in fact, his intention that the low duty on foreign ores should injure them (the interests represented by the deputation), because he thought that by bringing home these ores they should employ a large number of smelters. But they (the deputation) proved that for every smelter thus employed they must displace a number of miners. In consequence of their having things then unsettled, for the purpose of putting in another memorial, they collected what evidence they could regarding the price of coals abroad and at home, and a vast deal of other evidence, the result of which would be read in a second memorial, which before they left town they also presented. The memorial he was now about to read was prepared in consequence of the tariff first published. The other memorial was to meet the new tariff. But he was sorry to say it did not appear that the least attention had been paid to anything they represented; for, in fact, another tariff had come out, and in it no attention had been paid to the British miner. On the contrary, the first tariff was more favourable than the other two. He was sorry to say there appeared to have been private influence at work, which they had no means of rebutting. The clearest proof in the world that their mines had not had a fair and proper consideration, was, that when the first tariff was brought into the world, before their complaints were heard, another was proposed; and before their complaints were attended to, a third came out, in which not one single favour was granted to them—but the contrary. Mr. Treffry here quoted the duties proposed by the last tariff, and proceeded—The fact was, that, from the first time when a law was proposed in favour of smelting foreign ores in this country, the Government had always given them to understand—and he was the first person who waited on Mr. Herring on the subject—that they could not grant a prohibition, as that would injure the foreign miner, inasmuch as they had allowed him to build smelting-houses in this country. The foreign miner had laid out his money on the faith of an Act of Parliament, and therefore ought to be protected. It was always said by the Government, to the home producers, “we will give you a fair protection, but the difficulty is, we don’t know what to give; if we give you too much the foreign miner will be driven abroad to smelt his ores.” They had fallen in with these views, and had said to the Government they did not want to drive the foreign miner abroad, they only wanted a fair protection for the British miner. Now, it was quite clear that the Government could have no fear now of driving the foreign miner abroad at 10s. a-ton less than the ores of this county made in this country; and, therefore, if the foreign miners, and the different companies of foreign mines, had not availed themselves of the opportunity of smelting ores abroad, but had rather paid the 10s. a-ton for the English market, he said, if they paid the same difference now, to have the benefit of the English market, and of the Indian market, it would be a great boon to them; instead of which, the duties were what he had read to them. But what was most appalling was the quantity of low price ores that would come in at the low duty, because they had been collecting great quantities of ores on the banks of their mines, which would come in and overwhelm the Cornish mines at once; therefore there was no pretence for that being done. The amounts of copper coming from abroad were quite trifling; and, besides, only give them encouragement in Cornwall and the South-west parts of Devon

PROCEEDINGS OF PUBLIC COMPANIES.

ST. JOHN DEL REY MINING COMPANY.

The twelfth annual general meeting of the proprietors of the above company was held on Friday, the 27th inst., at their office, 8, Tokenhouse-yard.

G. D. POWLES, Esq., in the chair.

The advertisement convening the meeting having been read, the CHAIRMAN read the directors' report, as follows:—

REPORT.

Since the last annual general meeting of the proprietors of this company, a special general meeting of the proprietors was held on the 20th July, which was attended by Mr. Herring, the superintendent, on his arrival from Brazil. At that meeting the information on the state of the concern, communicated by Mr. Herring, contained the following particulars:—That the supply of ore in the mines appeared to be inexhaustible; that there were no sufficient grounds on which any expectation could be formed of an improvement or otherwise in the quality of the ore in the course of the mines, although, in some of the upper stages (the Chaminé), there was reason to expect an improvement; that during the first four months of 1841 it had been necessary to submit to the stamping of a low quality, in consequence of the peculiar position of the mine works—it being necessary to complete the establishment of a pump-shaft, to prosecute the sinking in the Gama Mine, and to prosecute the sinking in the Morro Velho mine; that when the sinking in the above two mines should be completed, he expected the produce would rise to 7000 or 8000 cts. per month; that he expected the hoisting-machine would be finished in October or November, by which a saving in expense would be effected of about 10/- per month. These expectations appear, by the advices subsequently received, to be in progress of being realized. The hoisting machine went to work, on one side, on the 4th December last; the other on the 6th January, and the produce, which, "for the first ten months of the year 1841, from January to October inclusive, had averaged only 2720 cts. per month, has, in January, 1842, to 7014 cts., with every reason to hope that thenceforward that would be found to be the minimum rate of monthly produce." The monthly produce of gold at Morro Velho during the past year has been as follows:—January, 489 cts.; February, 529; March, 603; April, 627; May, 666; June, 687; July, 658; August, 619; September, 603; October, 609; November, 673; December, 681; or a total for the year of 70,343 cts.—equal to \$11 lbs. 10 oz. Troy. The produce of 1840 was 70,360 cts.—showing a falling off in the past year of 2 per cent. The ore stamped in 1841 was 21,13 tons—slightly exceeding that of 1840, having given an average value of 37.17cts. per ton of ore, while, in the last year, it averaged only 32.76—6000 cts. per ton. This falling off in the value of the ore has been occasioned by the necessity which existed of temporarily suspending from working the richer parts of the mine during the time occupied in sinking and bringing it again in good stamping order, as already explained by Mr. Herring, and also in the annual report from Morro Velho, which will be found in an appendix; but now that the object of bringing the mines into regular working order has been attained, the richer stages of the United Mines will gradually come into play, and it is fair to expect that the average value of the ore in the present year will show a more agreeable result than it has done in that which has just expired. As a natural result of the diminished produce of gold, the year 1841 has not been a year of profit at Morro Velho—the establishment having barely paid its expenses, as appears by the following statement:—

The amount standing at the debit of the Morro Velho estate, in the balance sheet of last year, was 294,747 7 11

The amount carried to the debit of the account since, has been for disbursements from Brazil, and other disbursements 27,251 1 8

Less included therein—payments for negroes 247,496 11 9

And to its credit for produce of gold 24,791 13 8

Excess on receipts over expenditure 4 82 2 8

Which sum has been transferred to the credit of the profit and loss account, leaving the balance standing at the debit of the Morro Velho estate in the balance sheet, \$167. 00 7d., viz.—Balance as it stood last year 294,747 7 11

Negroes 2,381 1 8

297,988 9 7

It, although the year 1841 has not been a year of profit, the directors trust that some certain advances have been made towards getting the concern into a state of profit for the present year. Firstly, the mines have been brought into good working order, so that sinking and stamping may, in future, proceed together as they ought to do. Secondly, new mining ground has been opened—viz., the Champion and São Joaquim Mines, which have greatly increased the productive powers of the concern. The Lourenço ore is now the richest east to the stamp, and is already capable of supplying eleven stamp-heads. The Champion ground, from its great extent, is likely to prove of considerable importance. The ore near the surface was found extremely poor, and in February, 1841, produced only 14 cts. per ton of ore, but in December it has gradually improved, having yielded, in December last, 24 cts. per ton. Thirdly, a great advance has been made in the surface works; of these, the hoisting-engine has been already altered to, and its beneficial operation is already sensibly felt. Two large tanks have been constructed, by which a large bulk of water is held in reserve, to assist in working the stamps during the dry season, when, through the effect of the intense heat of that climate, the regular supply of water usually fails short. These tanks have already, according to the last advice, done good service, and are likely to contribute materially to the profitable working of the mines. Owing to the superior importance and urgency of the hoisting-engine and tanks the completion of the proposed alterations has been necessarily suspended, but in January this interesting work was resumed, and by the 1st of February, 1842, was completed. Should the expectations of the productiveness of this process prove well founded a sufficient number of arrastras will be prepared, in the view of thereby being enabled to obtain a large accession of produce at a comparatively trifling cost. Fourthly, the month of January of the present year has commenced with a profit of \$600., and the directors trust that each succeeding month will be found one of profit, so that they may at length have the long desired satisfaction of remunerating a dividend to the proprietors. In the last annual report it was stated that a purchase of negroes had been made at Morro Velho, amounting to about \$400. Of this there was paid in last year \$2011, and the remainder has been paid in the present year. The company is free from debt, both at home and abroad. There has been an increase in the number of natives employed on the establishment—on the 31st of December, 1840, it was 87, and on the 31st of December, 1841, 91. The directors are very anxious to see this description of labourers increase, and they are persuaded that every means are used on the establishment to encourage them. It is satisfactory to see that the system of bargain work has been introduced amongst those of whom who work underground, and that the native mechanics are getting into the habit of regular work. One great difficulty with the native hitherto has arisen from the unsettled nature of their habits, so that little dependence could be placed on them for regular work. The number of negroes belonging to the company is 414—viz., 273 men, 109 women, and 32 children; they continue to receive kind and careful treatment, and to deserve it. The annual report states that they are "orderly, contented, and happy, and that they" will deserve the best of treatment. All items of detail respecting the establishment at Morro Velho will be found in the appended annual report received from thence. Attached will also be found the receipts and expenditure for the past year; profit and loss; gold reductions and balance-sheet; likewise statement of expenditure and produce at the mines.

Balance-sheet.

Da.	Cs.
Reserve account	61 17 4
Capital stock	4,000 0 0
Bank cash	8 4 4
S. Hartman and Co.	2,471 6 11
Morro Velho estate	87,000 9 7
Gold of 1841 (on 120 shares)	60 0 0
Bank and Co.	8,333 0 8
	416,029 17 7

Profit and Loss.

Da.	Cs.
20—May 13—General expenses	1101 8 7
Interest	1377 14 11
	2779 4 6
20—May 13—Balance from former account	4702 14 8
20—Interest account	18 8 7
Morro Velho estate, less excess of receipts over expenditure, from 18th May, 1841, to this day	83 2 4
	2779 4 6

The CHAIRMAN stated that the accounts received since the preparation of the report were very satisfactory. They showed that the profit of January and February amounted to £1400., the produce for February being larger than ever had before been received by the company, and for which they were indebted to the tanks. The company had here a surplus of £1000., and in Brazil a surplus of £2000.—Indeed, their affairs were in a most satisfactory state.

Mr. Bowens wished to have a little explanation on the subject of the debts belonging to the company. It was stated at the last meeting that the company had purchased 73 slaves; the number of slaves in 1840 was 88, to which, if 73 were added, would make 161, but it appeared from the accounts at present submitted that there were only 414 blacks belonging to the company.—The CHAIRMAN explained that 30 of the slaves purchased had arrived at the time of making up the accounts for 1840.—Mr. Bowens then inquired if the directors had any account of the number of deaths, so that these must necessarily add to the company's slaves?—The CHAIRMAN then referred to the yearly account, which showed that 10 males, 4 females, and 12 children had died in the course of the year, and that 18 children had been born in the same period.—In reply to a proprietor, Mr. Haxane, stated that, from their constantly increasing negroes, it was impossible to get at the average number of the deaths, but he should suppose that 4 to 5 per cent, would be about it.—Mr. Bowens then wished to be informed how it was that, although the number on the establishment was less in 1841 than in 1840, the expenses for salaries had increased £10,000 million? He found that in 1841 there were on the establishment 44 Europeans, 123 natives, 26 hired labourers—in all 193; when in 1840 there were 43 Europeans, 87 natives, 26 hired labourers, or 154—showing a decrease of 19.—The CHAIRMAN replied that two native captains came home last year, and their salaries were paid, and plied to the salaries' account.

Mr. Bowens thought it would be more satisfactory if the accounts were kept not in a dollar measure, so that they could be understood. There

was evidently 10,000 milreis more on our account the last year than in the preceding year.—The CHAIRMAN stated that the amount would vary, they might send out more hands one year than another.—A PROPRIETOR wished to see the books belonging to the company, he understood every proprietor could do so, but he was refused yesterday, until the secretary could obtain the consent of the board.—The CHAIRMAN stated that the secretary was perfectly right.—Mr. BOWENS then stated he would like to have some details, to which the CHAIRMAN replied that it would be waste of time.—Mr. BOWENS stated it could be no waste of time for the director to put the accounts in such a shape as to satisfy the shareholders. What was the use of their meetings, if, when a difference of 10,000 milreis appears, a proprietor was not allowed to know how it arose? The expense of sending out people and bringing them back ought not to be set down as salaries, and should be kept as a separate account.

A PROPRIETOR then inquired if the want of water, as stated in the last account from the mine, would be of such vital importance to the company as was set forth?—Mr. HERRING stated no interruption had as yet taken place, and he could not think there was any reason for the unusual anticipation that had been expressed in the report alluded to. The thing was, that the parties in the Brasil wanted another dam, and, as the directors were a little against it, they had made out a strong case, and now the dam was progressing; the expense would be about £600., and it would guard against a want of water.—A PROPRIETOR thought it a very prudent course.

Some conversation then ensued upon technical matters, and the treatment of the negroes, during which it was stated that the negro children had no further instruction than the "Padre Nostre," which was taught them by the "padre," and that the whole body of negroes attended church every Sunday.—A PROPRIETOR expressed a wish that some means could be found by which the negroes could have a chance of ultimate emancipation.—The CHAIRMAN stated that the blacks were much better off than the labourers in Europe, or the free native labourers in Brasil.—In reply to a proprietor, Mr. HERRING said there was nothing objectionable in the present working of the mine, and that his plan was being carried out in every respect—it was worked very fairly.—The CHAIRMAN hoped he was not too sanguine in expecting to declare a dividend in next November.

Mr. BOWENS could not get over a statement that was made in the last report, that there was a balance of £2762. in January, and that there was some foundation in the hope of receiving a dividend, instead of which a call of 10s. per share was made, and he thought the proprietors ought not to separate without guarding against a recurrence of the same. The call, made as that one was, without any explanation to the shareholders, had reduced the shares, so that, at last, they were worth next to nothing; they must provide against the directors making another call without first calling the shareholders together.—M. DUNALDSON (a director) explained that the call was made to pay for the slaves.—Mr. BOWENS observed, that he did not expect a call, but a dividend.—The CHAIRMAN stated that the proprietors had no right to fetter the directors, who were obliged of times to incur liabilities, and the right of making calls was their only security. They did not think it worth while calling the proprietors together every time £1000. was wanted, but advanced the sum. There would now be no necessity for another call, as they owed nothing. He thought it a most unnecessary discussion.—Mr. BOWENS contended it was not an unnecessary discussion; he paid his calls willingly, but objected to have calls made without any explanation as to the why and wherefore; every proprietor had a right to make a resolution to protect himself. He (Mr. BOWENS) then moved—"That no call be made for the future without first convening a meeting of the proprietors."—A PROPRIETOR immediately seconded the resolution, but the CHAIRMAN declined putting it, stating that he would not put such a motion, and if the hon. proprietor were discontented he might take legal advice upon the subject.—Mr. BOWENS replied he would take legal advice.—The CHAIRMAN stated that the question could do no possible good, and only create differences between the directors and the proprietors, which ought to be avoided; to which Mr. BOWENS replied that the conduct of the directors had already reduced the value of the property to nothing.

J. D. POWLES, Esq., was then re-elected a director, and, in consequence of G. V. DURVAL, Esq., having gone abroad, Sir R. DOBSON was elected a director to fill up the vacancy, and A. LONGHORN, jun., Esq., was re-elected an auditor.—A PROPRIETOR then inquired if he might come to the office and examine the items of the expenditure, as there was one item amounting to £1100. 13s. 7d. for salaries to directors, secretary, and clerk, rent, office expenses, postage, stationery, advertisements, and incidental expenses, all classed in a lump!—The CHAIRMAN replied in the affirmative, and stated that they had better prospects than ever, as last year they had £6000. to pay for negroes, while now the company was free from all debt.

The meeting then adjourned, the CHAIRMAN explaining that he would put Mr. BOWENS's motion, as the deed authorised the directors to call for money as required.

WEST WHEAL JEWEL MINING ASSOCIATION.

A special general meeting of the proprietors of the above association was held at their office, 23, Threadneedle-street, on Wednesday, the 25th inst., for the purpose of increasing the capital of the association, in conformity with the provisions of the Deed of Settlement.

J. HAXANE, Esq., in the chair.

The advertisement convening the meeting having been read, the SECRETARY read the clause of the Deed of Settlement under which the increase of capital may be made.—Mr. MOYER then moved, and Mr. SAMSON seconded, the following resolution, which was carried unanimously:—

That the capital of the company be increased by the sum of 70000, and that such increased capital be raised by further calls on the present shares, consisting of 20s. to the extent of 3d. per share; such calls not exceeding £1 each, to be made by the directors and committee of management, as, and when, they shall deem requisite, and in conformity with the company's Deed of Settlement, bearing date the 18th day of October, 1840.

The meeting then adjourned.

NATIONAL BANK OF IRELAND.

At the annual general meeting of the above bank, held at the office, 13, Old Broad-street, on Wednesday, the 25th inst., the directors' report showed, that the business of the bank continued steadily to increase, the amount of undivided profits at Christmas, 1841, being £0,000,14. 10s. 3d. In the course of the discussion that ensued, a resolution was proposed, having for its object the appointing of auditors, also that the report should be referred back to the directors, for the purpose of having additional particulars added thereto, for the information of the proprietors; but which was opposed by the directors, the chairman stating that auditors were only resort to in a failing concern, and the hon. proprietor, seeing that the meeting was against him, withdrew the motion.—The report was then carried unanimously, and, after some further business, the meeting adjourned.

MINING CORRESPONDENCE.

ENGLISH MINES.

HOLMEYR MINING COMPANY.

May 23.—I beg leave to inform you that the hole in the 110 fathom level west is still about eight inches wide, and producing staves of ore. In the 100 fathom level west the hole is ten inches wide, and worth 8f. per fathom; in this level there are alterations; the hole in the eastern slope, in the back of this level, is twenty inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is twenty inches wide, and worth 8f. per fathom. In the ninety fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is twenty inches wide, and worth 8f. per fathom. In the eighty fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the seventy fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the sixty fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the fifty fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the forty fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the thirty fathom level west the hole is eighteen inches wide, and worth 8f. per fathom; the hole in the eastern slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the western slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom; the hole in the north slope, in the back of this level, is eighteen inches wide, and worth 8f. per fathom. In the twenty fathom level west the hole has not yet been taken down; the seat export, however, will furnish particulars as to its character and quality. In this level, west of Wall's shaft, to one foot wide, and intersected with crevices, the hole is eight inches wide, with a small proportion of ore. The tribute pitches are without important alteration.

F. PHILLIPS.

ARMED UNITED MINING COMPANY.

May 23.—In the forty fathom level east the hole is about fifteen inches wide, composed of slate, mica-schist, and ore, worth 10f. per fathom. The hole in the forty fathom level west has not been taken down since the commencement. In the thirty fathom level east the hole is at present about one foot wide, and, although composed chiefly of slate and mica-schist, is not without ore. In the twenty-five fathom level east the hole has not yet been taken down; the seat export, however, will furnish particulars as to its character and quality. The tribute pitches, on the whole, are looking favourable, and another pitch of ore is now in active course of dressing.

J. H. HARRISON.

TREVOSE MINING COMPANY.

May 23.—The hole in the forty fathom level east of engine-shaft is ten inches wide, producing some good ore. The hole in the thirty fathom level east of Williams's shaft is small and unproductive. The hole in Howard's shaft, under the thirty fathom level, is twenty inches wide, very good tribute ground. We have suspended sinking this shaft under the thirty until we get the flat-roof to work upon it from East Trevoe engine.

H. WILLIAMS. J. MORCOM.

TREVOSE CONSOLIDATED MINING COMPANY.

May 23.—Christoe Shaft—We have made but little progress in sinking this week. The seventy east is still disordered by a slide. The seventy west is two feet wide, producing some ore. The sixty east, kindly, is with stones of ore; this level west is two feet wide, stones of ore, very kindly; the pitches generally are looking well. At Good Fortune the forty-four west is twenty inches wide, producing good stones of ore. The forty-four east is eighteen inches wide, worth about 6f. per fathom, and a good hole in the back. The thirty-four east is about four feet wide, and worth 7f. per fathom.

W. SYMONS.

WEST WHEAL JEWEL MINING ASSOCIATION.

May 23.—The ground in Buckingham's engine-shaft, below the seventy fathom level, continues fair for sinking. The Seventy East, on the

